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## Using a computer negotiations simulation to improve the writing of English language learners in a specially designed academic instruction in English world history class

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USING A COMPUTER NEGOTIATIONS SIMULATION TO IMPROVE  
THE WRITING OF ENGLISH LANGUAGE LEARNERS  
IN A SPECIALLY DESIGNED ACADEMIC INSTRUCTION  
IN ENGLISH WORLD HISTORY CLASS

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Interdisciplinary Studies

---

by  
Craig Steven Wilson

June 1998

USING A COMPUTER NEGOTIATIONS SIMULATION TO IMPROVE  
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## **ABSTRACT**

This thesis is designed to answer the question, "Can a computer-based role-playing simulation that engages high school English Language Learners (ELLs) in an international negotiation meet their unique language needs to facilitate writing improvement and increase academic content knowledge and critical thinking skills in a Specially Designed Academic Instruction in English (SDAIE) World History class?"

During this qualitative case study, students developed the knowledge and skills necessary to take on the roles of diplomats from various countries in the Middle East. They then used a local area network to exchange e-mail messages with other groups in the class. The objective was for student teams to create proposals that they thought would solve the conflict between the Palestinians and the Israelis, and convince other groups to agree with their proposals. This design was created to use academic content from World History in a simulated environment to stimulate authentic use of complex language.

Data analysis of journal entries, periodic essays, e-mail messages and proposals revealed a dramatic improvement in writing skills, academic knowledge and thinking skills of these ELLs. Students increased their knowledge and understanding of the complex issues involved in the conflict in the Middle East. Their writing improved over the course of the treatment, and the expression of advanced thinking skills was much improved. It is clear that computer simulations can be very effective for ELLs in SDAIE classes.



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## **CHAPTER ONE:**

### **STATEMENT OF THE PROBLEM:**

This thesis is designed to answer the question, "Can a computer-based role-playing simulation that engages high school English Language Learners in an international negotiation meet their unique language needs to facilitate writing improvement and increase academic content knowledge and critical thinking skills in a Specially Designed Academic Instruction in English (SDAIE) World History class?"

This is a relevant question for discussion in the context of public education in the state of California in the 1990's. A large number of the students in California's public schools come from homes where English is not the primary language. These students come to our classes with a wide variety of English language skills, and just as wide a variety of academic background in their primary language. At the secondary level, this linguistic and academic diversity is further exacerbated by an extreme time pressure to meet graduation requirements in four years of high school.

Many English Language Learners are taught English in a language development class. These classes exist in a spectrum from traditional English as a Second Language (ESL) classes where English Language Learners are taught basic grammar and vocabulary all of the way to contemporary English Language Development (ELD) classes that use Whole Language and literature-based approaches that nurture students' natural language growth.

But during the time that it takes English Language Learners to learn grade-level English skills, they must also keep up with grade-level academic content. In schools where there are high concentrations of students from the same primary language, teachers are able to teach this academic content and cognitive thinking skills in that language. These are called bilingual classes. Math, science and social studies classes are taught using texts, support materials, and instruction in the language that the students already understand. This is an excellent setting for students to stay at grade level in the academic content for the first couple of years as they learn English.

But in schools where there are not enough bilingual instructors, where there are not large groups of English Language Learners who speak the same primary language, and where the English Language Learners have already acquired functional English skills, SDAIE content areas classes are used to meet the unique needs of the English Language Learners. The students are taught math, science, social studies and literature in English using special strategies and materials to make the academic content more comprehensible to them. The purpose of these SDAIE classes is to develop the students' academic knowledge, cognitive skills and English language abilities while focusing on a specific content area.

Many English Language Learners are given all three types of classes; bilingual, English Language Development and SDAIE. If they are provided only basic ESL services, they

will graduate from high school only being able to identify simple vocabulary and grammar points of the English language. Because they do not understand the language being used, if they are just given the same classes as every other student in high school, they will not develop academic English skills and they will fall behind in the content and critical thinking skills.

The students in the SDAIE World History class that this study is examining are all English Language Learners. The course is a graduation requirement that most high school students take in their sophomore year. Because language ability is more important than grade-level classification, English Language Learners are placed in this course when they reach an intermediate level of fluency (Limited English Proficiency, LES) on a district oral proficiency assessment, no matter what year they are in high school. The goal of this course is to increase the English Language Learners' language abilities to Fluent English Proficient (FEP) so that they can move into mainstream content classes and/or graduate.

The question this thesis is addressing is also relevant because of the technology that is available for educators today. Every couple of months, new hardware and software are developed that can drastically change the way teachers teach and students learn. For less and less money, a classroom can be equipped with computers that are connected together to allow sharing of information and ideas between students in a class, from class to class, and across the world.

One application of new technologies is the use of computer-aided simulations. Teachers have long used role-playing in their classes, but when the power of a computer is used to simulate an alternative reality, the potential for significant learning seems almost unlimited. As faster and more complex computers are placed in classrooms, more realistic simulations become possible. The recent emphasis on virtual realities makes the question asked in this research all the more critical.

## **CHAPTER TWO:**

### **LITERATURE REVIEW:**

In an effort to identify the current knowledge base and gaps that exist in the research, two main areas of literature were pursued. Theories of second language development were examined as they apply to high school students in SDAIE classes, particularly in the area of literacy and writing development. Research in the uses of educational technology to develop writing skills, primarily looking at hypermedia and computer simulations was also examined. A great deal of research on these two main topics was found, as well as a few principles applicable in both areas. The following is a synopsis of the findings:

### **SPECIALLY DESIGNED ACADEMIC INSTRUCTION IN ENGLISH:**

From the research, six principles relevant to this project were identified that would make a SDAIE learning environment linguistically appropriate to develop writing in English Language Learners (in other literature referred to as Limited English Proficient or LEP students). These six principles were that the learning environment must be student-oriented, it must facilitate social interaction, it must be authentic and meaningful, it must encourage risk-taking, it must include visuals, and it must allow extra processing time.



## **STUDENT-ORIENTED GOALS:**

A SDAIE lesson must address four main goals. It must help English Language Learners learn English, teach content, teach higher-level thinking skills and promote literacy (Diaz-Rico & Weed, 1995). The SDAIE classroom is an academic content class, but because of the unique nature of the students, English language development must be an equal goal. The curriculum must be shaped by the students' skills and experiences. State frameworks designed for the general population are not as relevant to English Language Learners because of their different educational and linguistic backgrounds. English Language Learners' traits must be taken into consideration even when determining learning strategies used in class (Vasquez, 1989). Not only what is taught in a SDAIE class, but also how it is taught should be molded by the characteristics of the learners to be affected.

English Language Learners' background knowledge can be activated through classroom activities that create a shared experience (Law & Eckes, 1990). Using the Language Experience Approach (Chamot & O'Malley, 1994), students and teacher share an experience, such as a walk around the school, a visit to a zoo or an art activity. While they are experiencing this new environment, they discuss it. Back in the classroom, the teacher has the students describe what they did and saw. The teacher writes what they say on the board. After several sentences, the students read what they have all just written. The students can read it because they

just wrote it. This allows the curriculum to be based on experiences from the students' personal knowledge (Roberts, 1994).

Peyton (1993) found that dialogue journals are another way to tap into students' background experiences. In dialogue journals, students can write about topics that are important to them. They choose what they want to focus on. The teacher does not establish the topics or a preset schedule of topics that must be covered in sequence. Students create their own content goals, because sometimes their concerns and interests are personal.

The California Teachers of English to Speakers of Other Languages (CATESOL) has clearly explained this principle in their position statement on Specially Designed Academic Instruction in English: "To instruct ELLs effectively, teachers must create a learner-centered environment, recognizing that student diversity is a resource and an asset in the classroom" (CATESOL, 1997, p.1).

#### **SOCIAL INTERACTION:**

Lev Vygotsky (1978) identified two levels of student achievement. What learners can do by themselves, and what they can do when they are working with others' help. The difference between these two levels of achievement is their "Zone of Proximal Development." The distance between the level of independent problem solving and level of potential development through adult supervision or collaboration with

more capable peers is the place where learning occurs. Social interaction is necessary for students to operate in this zone (Freeman & Freeman, 1992).

Learning is a social process where the teachers and students focus on the acquisition of desired skills and abilities (Richard-Amato, 1996). Students and teachers are active participants in the negotiation of meaning and the construction of knowledge. Meaning is inherent in communication, and to share that meaning, there must be interaction between parties. In a SDAIE class, meaningful interaction about content of interest is the goal.

SDAIE classes must be highly interactive and emphasize problem solving to provide the social setting necessary for language development and academic and cognitive development (Collier, 1995). Without social interaction, students' English will not develop at the same rate as their content knowledge. Collaborative interaction will facilitate the negotiation of meaning essential to language development.

In many classrooms, English Language Learners are educated as isolated individuals and rarely given opportunity to work with other students on group projects. In a SDAIE classroom, English Language Learners need to work as part of a team. This type of classroom organization will help develop teamwork skills that American employers say will be required for the 21st century (Romo & Falbo, 1996). This also takes the competition away from individuals and focuses it on groups. Proper grouping can allow all students to share in the experience of winning as well as losing.

English Language Learners acquire both language and content more effectively when instruction facilitates student interaction. They should be grouped in many different ways, and have the opportunity to use the target language to interact with each other and the content (CATESOL, 1997).

In an interactive classroom, learners spend less time passively listening to the teacher, and more time mastering the language (Northcutt & Watson, 1986). Grouping students heterogeneously allows students to interact with more capable peers. This results in more interactions per child than teacher-centered interaction. More interactions produce faster language development.

Cooperative grouping that fosters positive interdependence will accomplish this interaction (Sanchez, 1989). It will not only facilitate the linguistic development, but also social and academic development in a way not possible in less interactive environments. Cooperative learning is also an effective technique that fits the learning style of students from Latin America (Cornell, 1995). It allows positive cross-cultural interaction between Anglo/U.S. students and those from other cultures.

Collaborative activities provide ideas for writing and guidance for writing (Estrin, 1993). Students whose innate verbal styles are communal and cooperative may benefit particularly well from classroom activities which emphasize teamwork. In writing workshops and peer editing or response groups, students assist each other in various stages of the writing process. This provides a context for language

development.

Simply allowing an English Language Learner to work with a partner is another way to foster the interaction necessary for language development (Kinsella, 1993). Pairing him/her with a same-primary language speaker will allow use of the native language to aid comprehension of English meanings. Pairing with a sensitive learner who is more skilled, can encourage more rapid English development.

Even literacy itself must be developed in a sociocultural context. Literacy is a way of processing information which affects ways of interacting. Literacy is communication that takes on meaning within specific social contexts. The acquisition of literacy implies the acquisition of values and uses of language. Literacy cannot be value free, because it always occurs in a social and cultural context (Roberts, 1994).

Journal writing can build strong personal ties and give students access to a member of the new language and culture (Peyton, 1993). Through this relationship, the student can reflect on new experiences and emerging knowledge. With the help of another individual they can think through ideas, problems, and important choices.

Class discussion of papers can also improve writing skills (Estrin, 1993). The teacher can make comments on the writing, but provides anonymity to the writer by not mentioning their name. This creates an atmosphere of respect and acceptance of students' opinions, values, and ideas. Style, vocabulary, grammar, punctuation, organization, and

sentence structure can be discussed with the class. When the students see the words, sentences, and paragraphs which they and their peers have written, the study of how to rephrase becomes a more meaningful experience in both language and composition.

One-to-one writing conferences with the teacher are another source of this valuable interaction. Student-teacher conferences have long been considered an effective means of providing writing instruction. Conferences can provide "scaffolding," a mechanism by which a more experienced writer provides temporary intellectual support that assists a learner in developing new ways of thinking (Hornick, 1986). This places the learner in Vygotsky's Zone of Proximal Development, allowing him/her to develop writing skills.

#### **AUTHENTIC AND MEANINGFUL:**

English Language Learners must be reading authentic texts and writing for useful purposes (Freeman & Freeman, 1992). They need many opportunities to read and write for real, personally significant purposes. Most teachers assign essays as reviews of previous learning. Students need more motivation than this to strive to master writing. Instead, writing should provide opportunities for students to organize and explore new information. They must see the usefulness of writing in getting things done in the "real" world (Hornick, 1986).

Just as in other subject areas, English Language

Learners in history classes can benefit from journals or learning log writing (Rogers, 1990). Two types of journals are effective with second language learners: content area and personal (Montague, 1995). Content area learning logs incorporate metacognitive development as students write about how they solved a math problem or what they did in a science experiment. Personal journals are a place for students to write about anything in their lives that interests them. English Language Learners are motivated to take risks because the topics that they are writing about are things that are important to them.

Montague (1995) relates how many student journals become a place where first drafts begin. These pieces are polished with the help of peer groups and conferences with an adult, until the author is ready to publish them. Eventually all student work is published in a school-wide magazine. In addition, some of the work is published in the city paper and some in state-wide publications. Many of these children continue writing into the summer on a personal basis because they see the activity of writing as a meaningful exercise of their own personal creativity.

Just as class activities must be authentic and meaningful, so the assessments used must measure authentic language (Moya & O'Malley, 1994). Using portfolios as assessment tools can provide student information based on authentic language activities. In English Language Development, authentic language can be assessed through formal classroom activities, natural settings like the

playground, and informal classroom settings like a cooperative group. An effective portfolio assesses authentic classroom-based language tasks, i.e., tasks that the student encounters naturally as part of instruction. "Focusing on authentic language proficiency across sociolinguistic contexts and naturally occurring language tasks acknowledges the holistic and integrative nature of language development and focuses on communicative and functional language abilities rather than attainment of discrete, fragmented skills"(Moya & O'Malley, 1994, p.4).

Demonstration of a particular skill in use rather than by giving a test on a subject is another way to make assessment more meaningful for English Language Learners. Cornell (1995) parallels this with evaluating a teacher's instructional ability on the basis of classroom performance rather than on scores on a National Teachers' Exam or other standardized test. Evaluation of projects such as creating a history display, reciting a haiku, demonstrating a principle of science, or relating a cultural tradition are more authentic uses of language, and thus more meaningful to students.

#### **SAFE ENVIRONMENT:**

English Language Learners must feel that the classroom atmosphere is non-threatening and encourages linguistic risk-taking with minimal overt error correction (Sanchez, 1989). In order to make the language comprehensible, the learning environment must be positive and motivating. The teacher



must not stifle the language learners' personal exploration by constantly interrupting and correcting language form. The focus must be on meaning. Students are trying to communicate some meaning that is important to them. If their usage is interfering with that meaning, it will become apparent in the response, or lack thereof, from their intended audience. Constant teacher correction will not improve student usage because it will hinder the communication of a meaningful message.

The teacher must focus on the content or meaning of student responses, not pronunciation or grammatical accuracy (Kinsella, 1993). Developing English language skills is one of the primary goals of a SDAIE class, but content and meaning are equally as important (Diaz-Rico & Weed, 1995). While focusing on the subject area content, the teacher can also model correct usage and pronunciation. This will in turn develop the language skills of the students.

The classroom atmosphere must be non-threatening and relaxing (Roberts, 1996). Only then will students be willing to take risks, collaborate with each other as they write and revise their work. This will allow them to create new ideas and clarify their thoughts. In this type of setting, the teacher is a resource and need only intervene with appropriate input when necessary.

In a dialogue journal setting, the teacher is attempting above all to communicate with the student, so his or her writing should be aimed at the student's language proficiency level (Peyton, 1993). Teachers should not attempt to correct

student errors. They want students to write freely, without focusing on form. However, the teacher's response in the journal serves as a model of correct English usage. There are other opportunities for teachers and students to focus on correct form. Sometimes students do request correction, and teachers can use these opportunities to fulfill a felt need. This is when students are internally motivated to find out about a certain grammatical structure so that they can clearly communicate a meaningful message.

Even when a written work is to the point where form revision is necessary, moderate marking of structural errors is more appropriate (Hornick, 1986). Nothing is less likely to inspire a novice writer than getting back a corrected paper obliterated by red ink. A more effective approach for English Language Learners is to identify one or two sets of related errors that they need to work on. This allows them to focus their attention on a manageable set of problems as they seek to refine this particular piece of writing.

### **VISUALS:**

English Language Learners need non-textual cues such as visuals, props and real objects to comprehend language (Freeman & Freeman, 1988). Gestures and other body language also help convey spoken meaning. Meanings, sounds, and graphic symbols should be taught simultaneously (Roberts, 1994). Students already know that graphic symbols can express verbal meaning. Starting with what learners already

know has always been effective educational practice.

Many teachers use visuals to teach cognitively demanding textual material because they provide clues to the meaning of text (Levine, 1990). In a SDAIE history class this could be a series of questions about the content of a picture in the student textbook. The answers to these questions could be compiled by the students into a paragraph that explains the main point of the textual material accompanying the picture.

Realia, manipulatives, graphic organizers, media and other sources can be used to explain abstract concepts (CATESOL, 1997). Realia are objects that represent the items being discussed in class. Allowing students to handle tea bags during a SDAIE history discussion of the Boston Tea Party provides connections from concrete to abstract. Manipulatives, like realia, represent objects under discussion. But they are used to show relationships between objects or ideas. Graphic organizers are cognitive maps that use spatial relationships to show concept organization (Diaz-Rico & Weed, 1995). All of these tools help make textual information more accessible to English Language Learners.

#### **PROCESSING TIME:**

English Language Learners must have sufficient "wait time" before producing answers (Richard-Amato, 1996). English Language Learners need the extra time to process the question, formulate their answer and then phrase it in acceptable English. Kinsella (1993) recommends waiting 5

seconds before expecting a verbal response from an English Language Learner. Many teachers try to avoid this silence because they feel it is embarrassing at least, and a sign of ignorance at worst. They quickly move on to another student or answer the question themselves. Repeating and rephrasing the question are better alternatives to allow the appropriate wait time without having "dead" time.

Even in assessment procedures, English Language Learners need a different time frame than most students (Fichtner, Peitzman & Sasser, 1991). Tests that must be finished in a specific amount of time create anxiety that puts English Language Learners in a high risk situation. These time constraints cause English Language Learners to make more mistakes than usual, and teachers have a hard time understanding the meaning students are trying to convey. The only function of time constraints in assessment is to confound the student's expression of his true ability.

#### **EDUCATIONAL TECHNOLOGY:**

From the Educational Technology research, this author also found that there are six principles to effectively teach subject area content and writing skills using word processing, computer networks and multi-media software. These six principles correspond to the six principles I found for SDAIE. The technology must be student-oriented, it must facilitate social interaction, it must be authentic and meaningful, it must encourage risk-taking, it must include

visuals, and it must allow extra processing time.

### **STUDENT-ORIENTED GOALS:**

Teachers cannot learn for their students. Teachers are only facilitators for learning. First-hand experience, active involvement and enjoyment can create an effective learning environment. Computer simulations create virtual environments where students can gain first-hand experiences that they otherwise could never have. These simulations also allow students to be actively involved in the learning process while enjoying themselves (Crookall, Coleman & Versluis, 1990).

All software must be designed with the user and the educational objectives in mind (Rieber, 1994). The starting point has to be the learner and the instructional objectives. These lead to the design of instructional strategies and then the selection of the most appropriate instructional medium (hardware and software) to deliver that instruction.

All too often, computer-based instruction begins with the technology and what it can do. When a new computer chip or a new programming language is introduced, educators begin to dream up new ways to show-off these new technologies. This creates technology-centered designs that allow the computer's capabilities to make important educational decisions, instead of student needs and interests. This results in impressive technocentric designs that do not allow effective learning. Media decisions(hardware and software)

must be made last. The key is to create computer-aided interaction, not computer-centered activity (Versluis, Saunders & Crookall, 1989).

Three learning modalities have been identified in literature as the most common methods of acquiring information: visual, auditory, and tactile kinesthetic. An environment where users can freely move around in large bodies of text, pictures, music and video is called "hypermedia" (Turner & Land, 1994). Hypermedia environments can integrate all three modalities and facilitate learning (Bermudez & Palumbo, 1994).

Most people learn through a combination of all of these modalities. But everyone has a preferred learning style. Visual learners use their eyes as their primary means of gathering information. Text, graphics, and illustrations, for example, reinforce this approach to learning. Auditory learners require sound as their main access to information. Tactile-kinesthetic learners need to become physically involved through touch and motion to be successful in learning. In order to provide for a variety of teaching and learning experiences, exposure to all modalities is critical. Computers using hypermedia environments can create this type of a learning experience in a different manner for each individual.

Students can also tap into their prior knowledge and experiences by entering a hypermedia environment that allows them to create their own paths through the information presented (Bermudez & Palumbo, 1994). Because levels of

fluency, knowledge, motivation, and interest are addressed individually in a hypermedia environment, English Language Learners can be included in the learning process. As students embark on their individual quest for information, different levels of interaction with the learning environment are established. If one learner is at a lower level of English fluency than another, he may require additional explanations or definitions to negotiate meaning. Each student creates a unique set of learning experiences that will enhance his/her knowledge base in a novel and personal way.

Learner variables such as cultural background, language proficiency, age, and gender play a role in determining how successful a computer game will be in providing relevant language-learning experiences for students (Hubbard, 1991). Students will not be engaged by a game or simulation that does not interest them. If it is irrelevant to their personal experience they will not invest themselves in the activity. If this happens students will not acquire the intended knowledge or language. The simulation/game must be designed around the learner's characteristics in order for it to be effective (Crookall, Coleman & Versluis, 1990).

How a computer-based simulation is used (pedagogy) is actually more important than the technology itself (Carrier, 1991). Computers alone do not help students learn. Teachers use computers to help students learn. The learning environment created by the teacher is what enables student learning. The technology is only a part of that environment.

A "Hangman" example of this is mentioned in the next section, Social Interaction.

Realism, challenge, curiosity and fantasy must be balanced in the instructional design of a learning environment to be intrinsically motivating (Rieber, 1994). It is not always the most realistic simulations that are the most effective. How effective a simulation is depends on the instructional level of the student. Experts benefit by as realistic a simulation as possible, but novices can be distracted or overwhelmed by the details and miss the main point of the simulation if there is too much information being presented at too fast of a pace. Too much realism may cause more harm than good for inexperienced students.

Challenge and curiosity must also be balanced to make a simulation effective. If a task is too tedious and boring, or too difficult and frustrating, students will not learn. The task must be novel, moderately complex and produce uncertain outcomes (Rieber, 1994). An element of fantasy is also important in simulations. Students must be able to imagine that they are completing an activity in a setting that does not really exist. Students must be able to suspend disbelief in order to function inside the fictional world created by the computer. This allows them to focus on the task without feeling like they are practicing classroom skills.

Computer games are learner-centered because they tap into a learner's natural desire to play (Baltra, 1990). Computer games do not focus on language development. They



encourage meaningful discovery because the content and skills are not directly presented, they have to be discovered by the learner. In an effective game, the student is motivated by the desire to have fun, and the learning is almost a tertiary effect.

Taylor (1990) found that when courses are designed around simulations and computer games, overt teaching of grammar takes place when learners perceive a need to know how to say something specific to the context, or what something from the simulation means. Even though the simulation is learner-centered, the content and skills are developed because students need them to function in the simulation. The key is again, to select appropriate simulations and games, and designing ways to integrate them into the curriculum. Designing useful activities that introduce and spin off the activity at the computer will make an ineffective simulation into an effective language-learning experience.

Carrier (1991) gives an excellent example of the critical nature of a learning environment built around a piece of software. He calls it the cooperative cycle because he feels that there is no educational advantage to having one student sit in front of a computer, type on a keyboard and watch responses on the screen. He describes the essence of a simulation as the interaction between students. He suggests a four step approach to create a learning environment based on a computer simulation.

The first step is to prepare the students for decision

making by having them read the instructions and discuss a strategy on how to best solve the dilemma created by the simulation. Students then enter the second step by keying their decision into the computer and recording the results. The third step is to analyze the information produced by the computer, decide what went wrong or right, and what they could or should have done differently. Follow up tasks are the fourth step. Here students write memos, chart results, update a narrative or answer worksheet questions. They then start the cycle over again by going back to step one, preparing for decision making. This will turn an ineffective simulation into an entire learning environment based on the computer game.

#### **SOCIAL INTERACTION:**

Software that supports collaborative problem solving can allow for peer support that brings learners into their Zone of Proximal Development with the computer acting as the mediator of language (Willis, Stephens & Matthew, 1996). Technology should enhance communication and interaction, not just deliver information. Students must construct understanding and knowledge in their own minds. Collaboration and teacher guidance can facilitate this process. By simplifying a complex problem, a teacher can bring it within a student's Zone of Proximal Development. Then as the student matures and the zone moves up, the situation can be made more complex to enhance development and

thus learning.

Hypermedia also helps to enhance the inherent social nature of language (Bermudez & Palumbo, 1994). Meaning is negotiated as students construct and manipulate information and interact with peers, teachers, and other significant individuals. Students discover novel relationships and learn to relate them to concepts they already know. Hypermedia focuses the learner's attention on relationships rather than on isolated facts. This develops their critical thinking and facilitates their language development in an interactive context.

In computer-aided simulations, the computer's role as mediator of language can take on many forms (Versluis, Saunders & Crookall, 1989). Whether it serves as a language-rich task master or simply as a digital pipeline, the computer encourages and fosters communication. It can be used to reach other people or as a source of information. Either way it promotes language skills.

Belisle (1996) also found that by using computers, students become better problem solvers and communicators. Over a network, using e-mail and sharing files, students can collaborate with other students and teachers. Networking electronically allows learners to create, analyze, and produce ideas more easily. Through this increased electronic access to the world around them, students' social awareness increases.

Computer simulations can be classified in a grid with two axes: control and interaction (Crookall, Coleman &

Versluis, 1990). Control refers to the amount of input the user must make to keep a simulation running. Control runs from the extreme of user as passive observer to simulations that require constant user-input in order to progress. An animated demonstration of an internal combustion engine would be an example of high computer control. Here the computer facilitates communication by serving as the focus of attention (Versluis, Saunders & Crookall, 1989). An adventure game where the user must constantly issue commands for the computer to follow is an example of high user control.

Interaction refers to whether a user is interacting with the computer or with other learners. A flight simulator would be an example of high computer-learner interaction because no one else is required for a successful mission. A negotiations simulation where remote learners try to resolve global dilemmas would be an example of high learner-learner interaction. In this situation, the computer is almost transparent.

Learner	•high learner control •high computer-learner interaction	•high learner control •high learner-learner interaction
	•high computer control •high computer-learner interaction	•high computer control •high learner-learner interaction
Computer	Computer-Learner	Learner-Learner
	INTERACTION	

Table One: Control/Interaction Matrix  
(Crookall, Coleman & Versluis, 1990, p.177)

The main goal of a language development simulation is not to convey content. It is the generation of relevant student interaction and English fluency practice (Carrier, 1991). Reading from the screen and writing related to the simulation will occur. But the discussion, debate, questions, answers, and decision-making are what will bring about the greatest amount of linguistic improvement. And this can only happen in a social context. Placing three or four students at one computer will necessitate establishing group consensus as they decide together on their next course of action (Baltra, 1990).

Pairing learners who speak different native languages in front of the computer terminal is another way to facilitate real communication in English, especially if group work or

cooperative learning techniques are used. Cooperative writing tasks or the use of problem-solving types of software or simulation games can enhance both language and literacy acquisition. Peer teaching also works well on the computer. Learners with more developed reading and keyboarding skills can direct their fellow learners toward successful computer use. Those they are coaching can ask for clarification without risking embarrassment in front of the class (Huss, 1990).

Another example of how social interaction affects computer-based language learning is described by Hubbard (1991). He explains how the computerized game, Hangman, can be ineffective as a language development tool in one context, and effective in another. Success in playing Hangman depends on whether or not the student knows that the word is an English word, whether they know any strategies to find the missing letters (like naming the high frequency vowels and consonants first) and being familiar with English spelling conventions.

When a student plays Hangman alone on a computer, s/he is not developing new vocabulary, reading or spelling skills because the words are not in any context. The most promising learning that might occur would be that general patterns of spelling might be inferred over time.

But when the same piece of software is used by a small group of language learners, Hangman becomes a conversational catalyst. It creates real communicative practice and negotiation of meaning. As the students discuss options and

strategies to solve the puzzles, they use language to talk about language. This increases language learning to a much higher level. The social context makes the software much more effective in developing language. This reinforces what Carrier (1991) said about methodology, not technology helping students learn.

#### **AUTHENTIC AND MEANINGFUL:**

Using networked message exchanges, students are more motivated to write well when they know their work will be read by peers (Peha, 1997). Because the communication is real, and not seen as a classroom exercise, students are willing to put more effort into their writing. Computer simulations where student-student interaction is high develop more language fluency because of the authentic nature of the language practice. The quantity and quality of writing increase when it is seen as relevant and meaningful.

Problem solving projects inspire students to use the Internet in authentic language intensive tasks (Willis, Stephens & Matthew, 1996). Some examples of these tasks are electronic process writing where students publish their work to receive feedback from other students, collaborative writing where students from different schools contribute to a shared creation, and social action projects which involve students from different locations in meaningful social interaction.

Computer simulations recreate social situations in which

students are encouraged to use language spontaneously. This language is authentic and communicative (Crookall, Coleman & Versluis, 1990). The focus is not on language form, but on the social situation created by the simulation. When students participate in a simulation, they do not see the time as spent on a class lesson. The language is not viewed as practice, but real.

Debriefing a simulation is another authentic source of communication (Jones, 1991). Having students discuss what actually happened during a simulation, who was making the decisions and how, and to discuss the reasons for this behavior are all excellent sources of meaningful communication. As group members share their findings, what they have learned and how they finally solved the problem, they are not only speaking, but they must practice listening to others (Carrier, 1991). Critical questions by the teacher as facilitator make this aspect of the simulation a language learning experience.

#### **SAFE ENVIRONMENT:**

When students communicate with each other using e-mail, the reader focuses on the message itself and much less on the form, grammar, spelling and mechanics (Belisle, 1996). While sending e-mail back and forth, partners begin to put aside their biases and focus more on the person and what they are saying. Shy students can express themselves and ask questions when they normally would not (Peha 1997). Students



who do not like to express themselves verbally in a group may perform better when writing. Students tend to express their opinions more openly without fear when behind a keyboard. This gives them self-confidence and improves their writing.

Constant, direct and overt error correction is counter-productive in computer simulations because text-based simulations provide immediate feedback regarding reading and writing in a non-threatening manner (Crookall, Coleman & Versluis, 1990). Take for example, a student participating in a computer simulation who must make a "life or death" decision for their character. If they misread the explanation that a certain type of fish is poisonous, they will receive immediate feedback about their choice without a direct insult to their reading ability. Their character dies because of consuming the fish. This is very different from the traditional behaviorist, "Wrong answer, try again." Students will be given feedback on their choices without having their motivation stifled by negative responses from the computer.

Hypermedia and computer simulations similarly empower learners by allowing them to choose their own path through information. The teacher is not seen as the source of information, but a facilitator (Turner & Land, 1994). By placing students in a simulation, the teacher is no longer seen as the focus of learning, but as a resource. In a simulation, the teacher does not have the right to intervene (Jones, 1991). The students must have power, including the power to make mistakes. Whenever a question arises regarding

the target language, culture or strategy, the teacher can be consulted (Meskill, 1990). But it is the students' role to think and make meaning for themselves.

People also do not like to feel that the computer is in control, directing what they do without giving them choices or explaining options (Turner & Land, 1994). By giving visible choices, good software empowers users by letting them know what will happen with their input. Users will better understand the results of their actions because they were warned before the mouse-click or return. Giving control to learners can happen by providing enough time for learners to complete their work, or by letting learners establish their own methods and levels of control (Egbert, 1996).

### **VISUALS:**

HyperCard® is one example of hypermedia software that allows the user to navigate through large bodies of text, pictures, sound and video with great ease. It lets the user control what information to interact with and what information to ignore. HyperCard® and similar hypermedia software allow attractive, meaningful graphics to enhance a learning environment (Turner & Land, 1994). Graphics make the environment more attractive (and thus motivational) to the learner, and they can make the software easier to use. Visuals provide greater similarity between the simulation and reality (Rieber, 1994).

Hypermedia's full color graphics, music, video, and

other forms of information transfer simulate real-life situations (Bermudez & Palumbo, 1994). This provides the context necessary for the attainment of meaning and thus promotes second language acquisition. Hypermedia goes beyond a visual presentation with other modalities such as sound and animation. As a result, the concrete, real world can be simulated in a classroom. As the learning environment becomes less abstract, relationships between concepts and words are strengthened.

The Macintosh® platform effectively combines text and graphics with very little effort (Rieber, 1994). This platform has changed the way that learners interact with a computer. Graphics are now integrated not just in application software, but even in the operating system. The marriage of text and graphics is no longer seen as a hurdle that must be overcome by software designers. This makes the software they produce more accessible to English Language Learners.

#### **PROCESSING TIME:**

Computer simulations allow real-time processes to be slowed down so that feedback can have meaning and students are able to formulate a response (Rieber, 1994). This is particularly helpful when the real-life process being examined in the simulation happens so quickly that English Language Learners would not be able to make the connection between their input and the consequences of their actions.

Feedback is more relevant because cause-effect relationships are more apparent.

Carrier (1991) found another advantage of computer simulations in that students can interact with the computer, and then move away into a small group discussion about what the next step ought to be. They can return to the computer and resume the simulation without disrupting the time flow of the simulation. This allows the wait time needed for language learners to decode the information, formulate an answer and find the correct wording to express their thoughts. The time pressure is removed so that students are able to focus on the face-to face communication that will not only solve the simulation dilemma, but also increase their language proficiency.

### **CHAPTER THREE:**

#### **RESEARCH DESIGN AND METHODOLOGY:**

##### **PROBLEM BEING ADDRESSED:**

Can a computer-based role-playing simulation that engages high school English Language Learners in an international negotiation meet their unique language needs to facilitate writing improvement and increase academic content knowledge and critical thinking skills in a SDAIE World History class?

##### **CONTEXT:**

Data was gathered during a three week unit on the Middle East. A SDAIE World History class at Moreno Valley High School used a Local Area Network and eight Macintosh® computers to conduct a teacher-created computer simulation. This HyperCard® based simulation created a role-playing international negotiation between countries trying to bring peace in the Middle East.

The students were English Language Learners at the Limited English Speaking (LES) level. Their English was good enough to understand instructions and read the text with basic understanding. They mostly came from Spanish-speaking families. Their typical pattern of education has been sporadic. Their instruction in their first language has often been disrupted by frequent moves and gaps in

attendance. Most came to California within the last three years. There were a few Asian students who typically had a more complete scholastic record in their primary language, but also had much less exposure to spoken English. For most of the students, this class was their first academic class taught in English. They had either come from a bilingual class, or they were new to the country. It is not unusual to have a 40-50% failure rate in this class.

The English Language Learners in this SDAIE World History class have often not had any previous academic success in English. They have been placed into classes that they were not linguistically ready for, and thus could not understand what was expected of them. To defend themselves, they often put on an attitude that they did not care about academic success, whether or not they really did. By the time they came to this author's class, this attitude had been ingrained so deeply that it took a great deal of effort to cut through. The activities described in this chapter were designed to do just that.

#### **SIMULATION PREPARATION:**

Before any information about the Middle East Crisis was presented, this author asked the students to create a "Middle East Journal". This consisted of notebook paper folded in half inside a construction paper cover. The students were allowed to decorate and otherwise personalize their journal because it was meant to be their primary means of written

reflection on the issues they studied.

The first entry in their journal was to answer the question: "Write a short essay explaining what some of the problems in the Middle East are, include the Intifada, the Golan Heights, West Bank, Gaza Strip, Occupied Territories, Palestinian Liberation Organization, Israel, Jerusalem and Zionism." This served as a pretest to determine students' writing ability and academic content knowledge about the Middle East Crisis

The students then received the necessary background information to participate in the computer simulated negotiation in a number of ways. Teacher-led discussion of religious background gave an historical framework to understand the current issues. Readings were assigned from the textbook and current newspapers to give more specific details. Students were encouraged, but not required to write whatever they wanted in their Middle East Journals to help them internalize the information they were acquiring. Students also created video presentations about assigned issues relevant to the Middle East peace process.

These video presentations were designed to examine the overarching question, "Who is Right? Israel or the PLO?" The class was divided into six cooperative groups so that they were balanced according to gender, native language and linguistic and academic proficiency levels. Each group was responsible for explaining one part of the big question. For example, one group explained Israel's reasons for their claim to the land in question. Another group gave the Palestinian

point of view on this issue. The other issues were on both sides of the Intifada question, and both sides of who is sponsoring the terrorism in the region.

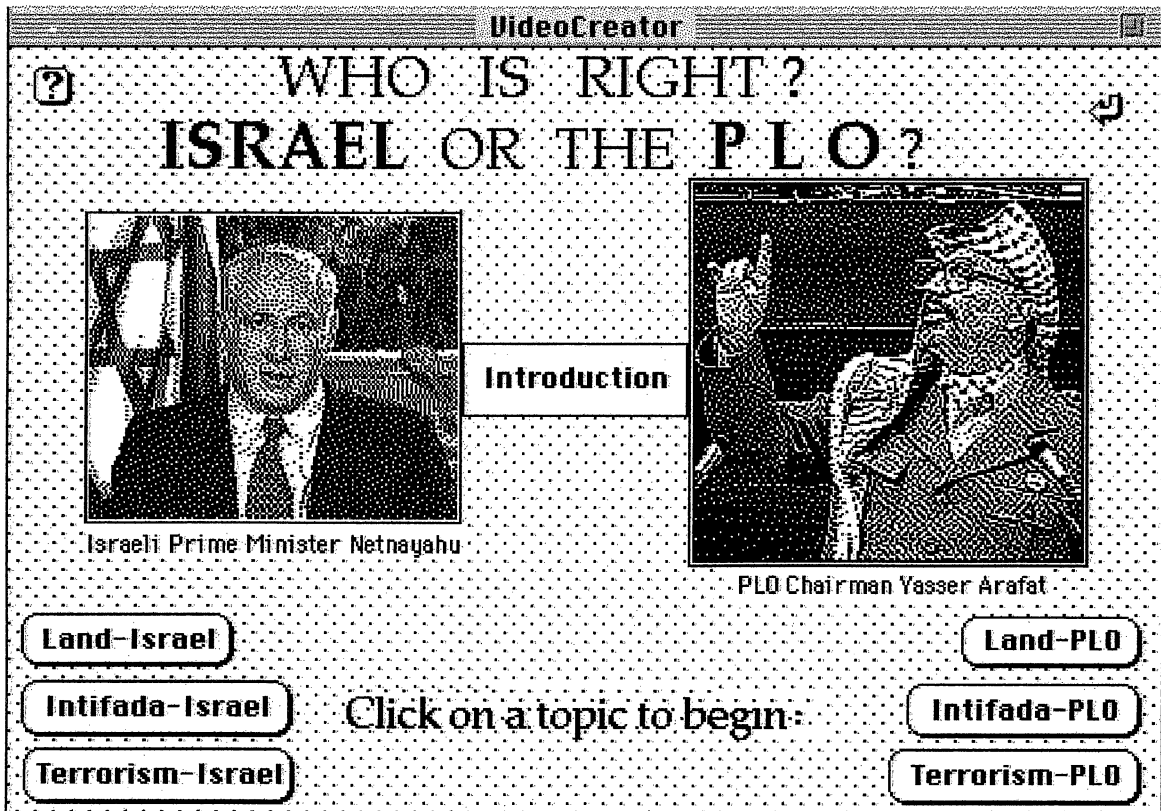


TABLE TWO: Video Creator Screenshot

Each group was given a copy of a teacher-created HyperCard© stack, "Who is Right? Israel or the PLO" (Wilson, 1996) that allowed them to read about their topic, see a map of the disputed territory, and with the click of a button, view three ABC News (1989) videodisc footage clips illustrating their specific textual information. Working collaboratively, students used this multimedia input to figure out what point of view they were going to represent. They then chose one of the three video clips available to them and planned their presentation for the class.



Each group stood in front of the class and explained their side of the argument. They were able to use their Middle East Journals as resources to help them explain their position. They showed their video clip, explained its significance, and then explained why they chose that particular clip. Finally they answered any clarifying questions from the class or the teacher.

When all six groups had presented their information, students had a clear understanding of the issues at stake and formed their own opinion. This author then asked them to write a short essay trying to answer the big question this activity was addressing, "Who is Right? Israel or the PLO?" This allowed students to reflect on their own learning, recognize multiple points of view and evaluate the evidence that they presented. It also helped them formalize the thoughts they had while other groups presented.

After these presentations, this author showed a National Geographic (1986) videotape, "Jerusalem: Within These Walls", that presented the historical and religious issues surrounding the city of Jerusalem. This added to their specific background knowledge, helped them to understand the complexity of the crisis and that simple answers are not available. After viewing the video, this author again had them write a short essay in their journal explaining what they saw as the major problems surrounding Jerusalem.

## **SIMULATION:**

Students were then ready to be introduced to the simulation. They had enough information and understanding of the issues to have an intelligent discussion about them. They understood that there is always more than one side to an issue, and that other people will not necessarily agree with them.

"Peace in the Middle East" (Payne & Wilson, 1992) is a teacher-created HyperCard® stack that created a negotiations simulation. The simulation had some graphics and maps, but was mostly text-based. The technology was not meant to present new information. Its main purpose was to serve as a mediator of language between collaborative groups across a local area network.

The negotiations proceeded through numerous rounds. Each round consisted of each group posting their opening position for all countries to read.

## CHECK PROPOSALS

**OTHER PROPOSALS:**

**See Proposal from:**

	↑	Israel				
		Jordan				
		Lebanon				
		Egypt				
		Saudi Arabia				
		PLO				
		Syria				
	↓					
<table border="1"><tr><td>Send a Message</td><td>Check Messages</td><td>Write a Proposal</td><td>Return</td></tr></table>			Send a Message	Check Messages	Write a Proposal	Return
Send a Message	Check Messages	Write a Proposal	Return			

TABLE THREE: Check Proposals Screenshot

After reading other countries' proposals, each country's team sent e-mail messages to other countries, responding to their proposals. These messages were only read by the authoring country and the recipient country.

## RECEIVE MESSAGE BOARD

Messages

Check Message From:

	Israel		
	Jordan		
	Lebanon		
	Egypt		
	Saudi Arabia		
	PLO		
	Syria		
<b>Send Message</b>	<b>Write a Proposal</b>	<b>Read a Proposal</b>	<b>Return</b>

TABLE FOUR: Receive Message Screenshot

Each round continued as each country's team read their messages and responded back to other countries. The first round took two class periods because interaction was slow at first. By the second round students became more familiar with the routine and the flow of messages increased. Subsequent rounds only lasted one class period each.

In addition to posting proposals and sending messages, students were also able to send copies of maps across the network. This allowed them to redraw boundaries and designate land allocations. This gave them the ability to make their textual messages more understandable to their audience.

The simulation progressed toward countries reaching consensus. As allies and enemies became apparent, country

teams began to forge agreements that they thought would bring peace to the region. This author asked students to write short essays periodically during the course of the simulation, explaining what they saw as the major problems in the negotiations, and what they proposed as solutions to these problems. This served to focus their thinking and give them practice in writing clearly.

This author cut the simulation off after six days of on-line negotiations. Issues were not totally resolved, but students were engaged in critical thinking and language that was well beyond what they were capable of before this simulation started. This author then had them write their post-test essay. It was the exact same question they answered before the activities began. They were able to use their Middle East Journal as a resource, and they had an entire class period to answer the question.

#### **METHODOLOGY:**

The data for this study came from two main sources: 1) the hand-written student journals that included class notes, reflections on the simulation, weekly essay questions and the pretest/post-test essays to assess improvement over the course of the treatment and 2) the computer generated transcript of every message sent and proposal made during the course of the simulation.

This author conducted a qualitative analysis of the data gathered during the simulation. Representative samples of

student journals were selected and used as case studies to identify patterns of learning. Transcripts of the proposals and messages that were sent during the simulation were examined to see the results of using a computer-based negotiations simulation to develop academic knowledge, thinking skills and writing skills in English. For continuity, this author included student quotes exactly as they appear, including all nonstandard usages. The students were referred according to the Greek alphabet and the feminine pronouns to retain anonymity.

Subject area content acquisition was measured by teacher evaluation of group presentations, journal entries, pre/post essay content, country proposals and e-mail messages from the simulation. Writing improvement was assessed by teacher evaluation of journal entries, periodic essays, and pre/post essay style. Writing improvement was also evaluated from the teams' e-mail messages and proposals that were posted during the course of the simulation.

## **CHAPTER FOUR:**

### **DATA ANALYSIS:**

#### **ACADEMIC CONTENT AND THINKING SKILLS:**

There were 34 students enrolled in the class, but only 24 students submitted journals that showed adequate participation in the treatment activities. This was mostly due to excessive absences or total disengagement with the simulation. These extreme examples of student alienation from class activities would be a source of further study, but that is beyond the scope of this project.

#### **JOURNAL ANALYSIS:**

Students' background knowledge in the area of the Middle East was very limited. This was apparent from the responses to the pre-test essay: "Write a short essay explaining what some of the problems in the Middle East are, include the Intifada, the Golan Heights, West Bank, Gaza Strip, Occupied Territories, Palestinian Liberation Organization, Israel, Jerusalem and Zionism.". Even the students who had assimilated some information from previous newspaper articles or the evening news, started their answers with the disclaimer, "I don't know much about this, but..." See Appendix A.

Many students knew that there was fighting and killing over religion, but they did not identify those religions.

Student Gamma was a good example of this tendency to blame these unknown religions, "Its not much but, I know that some people from Jerusalem don't like people from a different religion."

Most students were unable to identify the sections of land in question. One student was able to surmise that the West Bank was "the left side of the lake", but she did not know what body of water she was talking about. No one was able to identify what the Palestinian Liberation Organization was. One student even blamed the poor economy and farming as the main problem. A number of students either wrote the word, "nothing" as their answer or left the page blank.

Student Alpha gave a very typical response: "I really don't have any ideal about the Middle East but I think in Jerusalem couple of girls were killed by soldier and that about it." This knowledge came from a newspaper article the class had read a couple of weeks before as a separate assignment. A number of students referred to this incident as all they knew about the Middle East. It was apparent that the common level of academic knowledge about the Middle East was very low.

Even the students who showed the most content area knowledge did not have a grasp of the basic issues at stake. Student Beta at least knew two of the religions and what land was in contest, "The only thing I kind of remember is that Muslims, Hindus and Jews fought for Jerusalem. They all wanted to take over. Even though Jerusalem is a small piece of land." The incorrect inclusion of Hindus was left over



from the last unit covered in class on India, where Hindus and Muslims were in conflict. Student Beta knew that this small piece of land was being fought for, even though she did not state any specific reasons for this conflict other than, "They all wanted to take over."

Student academic content began to show signs of increasing as they began to interact with one another in the video presentations. Every student present was fully engaged by the creation of his/her own presentation. Students were reading the text of the screen, taking notes in their journals and discussing the meaning of what they had been assigned.

When it came time for each group to view their three video choices, they knew what they were seeing and what it meant to their topic without any teacher assistance at all. They viewed each clip multiple times and made their selection of which one they were going to show to the class to explain their point of view. They then planned their strategy for how they could best convey all of the information in a presentation.

During the presentations, every student participated with his/her group. Each student explained one or two facts that supported his/her position. The group then showed the video clip and explained what it meant and why they chose it. The class and teacher then asked clarifying questions to be sure we understood what they had said. One third of the students received all fifteen points possible because they had explained their position perfectly. One third of the

students scored only half of the points because they were unable to explain what their information meant, or had to do with the issue they were discussing. The other third of the class scored somewhere in between.

These results showed a great deal of content learning had occurred during the preparation for the simulation. The amount of background information that the students possessed was increasing through collaborative multimedia projects, textbook reading, class discussions and videotape viewing.

This improvement in content knowledge was also apparent from the periodic essays students wrote in their journals. Most students wrote notes and drew maps in their journals for their own benefit, but this was not required. They drew a line in their journal to separate the essay from their own journal entries. Journals were collected each night to keep in touch with what they were writing. But this author would not write any responses in their journals. These were not dialogue journals. Any input this author wanted to give, which was not much, was given verbally to the group as a whole.

The first short essay assigned was after all of the groups had given their video presentation, only two days after the pre-test essay. Each student wrote in his/her journal and answered the big question being discussed, "Who is Right: Israel or the PLO?" Most students sided with the group they had represented in their presentation, but almost all were able to give concrete examples of why they believed that.

Student Delta gave a typical response, "I agreed with the PLO. They are fighting for have their own country, the Israelites went out of Israel and now they want their land. Israel invaded the occupied territories..." This student had gone from blaming religion as the problem to explaining the Palestinian argument that Israel had left the land that now belonged to the Palestinians. Delta also identified the fact that the "Arab countries don't want Jewish people in Israel." This student now could name the key stake holders in the conflict and what they are fighting about.

From the same video presentations, student Gamma was able to deal with the same argument from a different point of view. Gamma compared the situation to a landlord leaving a house for a time and someone else moving in while you are gone. When you return, "...the people living there need to leave, because they knew that you were going to return some day. So for me the Israelis are right to fight for their land." This demonstrates an understanding of the historical setting of this conflict well beyond what had been apparent only two days earlier.

Another example of content knowledge increase came from student Alpha, who was able to give two concrete reasons for her choice. "I agree with the PLO. I chose it because the think that Palestine should have their own land...they were born there and should stay there if they wanted to....I think that everyone in the who(le) countrie should be free." Alpha was able to state her opinion that the Palestinians should have their land, and her reasons were that they were born

there and they should be free to live there. This shows a deep understanding of the historical facts that generations of Palestinians have been living on this land, and the Jewish occupation of these lands is historically recent. Again, this demonstrates large increases in academic content and critical thinking over a short period of time.

After viewing the National Geographic (1986) videotape, "Jerusalem: Within These Walls", the students wrote in their journals again to explain what they thought was the major problem in Jerusalem. Most of the students were able to give at least one historical fact to explain what the conflict was about. Alpha gave a typical, but not totally correct answer,

"The issue or the problem in Jerusalem are with four different religion. They who is the people of Muslim, Jews, Armain and Christian want their own piece of jerusalem. The Jews want to wall. Muslim have the dome. The Christian think Jerusalem is special because Jesus died there and Armain Im not sure."

The misunderstanding about the Armenian Quarter of Jerusalem was fairly widespread, but was cleared up during interaction in the simulation. Alpha was able to correctly identify the religious significance of Jerusalem to each of the antagonists, and the fact that they have divided Jerusalem among themselves.

With that historical foundation laid, the students were ready to begin the computer-mediated negotiation. After the fourth day of negotiations, the students wrote in their journals and told what they thought would be an appropriate solution to the problems they were negotiating. The purpose

of this was to be sure they were focusing on solving the historical problems in the simulation.

These solution essays also showed more academic content knowledge increases. A very popular solution was to divide the land into three sections, one for Christians, Muslims and Jews. Student Beta had a most eloquent explanation of her solution:

"Well one problem in the Middle East is the occupied territory. The reason it is a problem is because when the Israelies left their country the Palestenians arrievied and took over the country. But now the Israelie's came back and want their land back. But the Palestenians do not want to give it back.

My solution for this problem would be to divide the land into equal parts and give one part for each one. But the only way my solution will be good is if they both agree with my proposal."

It is very clear that Beta had a firm grasp of the historical roots of the conflict, and her solution was advocated by many of the country-participants. In this essay Beta was able to explain both opposing points of view and a possible compromise. This demonstrates not only academic content knowledge, but also critical thinking beyond the average high school sophomore level. Many students were able to generalize from the division of the city of Jerusalem between conflicting parties, to the establishment of political divisions in the disputed land.

The post-test essay was the best indicator of content knowledge and critical thinking increases. Two grades were assigned as evaluations of this dimension of learning. One

score was given for the amount of improvement between the pre-test essay and the post-test essay. The second grade was for the overall quality of the second essay by itself.

Every student who attended class and participated in at least some of the unit activities showed marked improvement between the essays. Three-fourths of the students scored a seventy-five percent or higher on this measure. Students were no longer beginning their essays with, "I do not know anything..." On the second essay they were confidently beginning, "The problems are..."

Student Epsilon went from a five line pre-test essay that vaguely identified religion as the problem, to a full page, single-spaced essay that correctly identified the Occupied Territories as "the Golan Heights, west bank and Gaza strip," explained that the PLO wanted to "get the Israelis out of the country," identified the Intifada as "riots in order to scare them away," and many other historical facts that were previously unknown to her.

Student Beta again showed critical thinking as well as content competency:

"What I learned from this assignment is that making Peace in the world is very hard especially if the people do not try to help. I learned that there are many problems like in Israel where people are fighting for a piece of land called Jerusalem. Everyone wants it, the Jewish, Muslims and the Christians.

That resulted in a big peace problem. Another problem is the occupied territories in which both Israelis and Palestinians want to take over Israel..."

Beta was able to explain the facts she had learned about the Middle East Crisis, but also convey some of the frustration she experienced firsthand during negotiations. I could almost feel the pain as I read, "There seemed to be many solutions but it's hard to know which one is the best." This shows that Beta was fully engaged in her role as a diplomat trying to solve an international crisis of world-wide importance.

Student Gamma had a similar response. She went from a three line essay that explained, "It's not much but, I know that some people from Jerusalem don't like people from a different religion." to a two page single-spaced essay that begins, "Well all started when the Jews lived in Israel 3,000 years ago..." Gamma proceeded to use almost every historical fact discussed over the last three weeks to answer every aspect of the question prompt. She even contributed her solution about dividing the land in pieces for each religion. There is no question that Gamma increased her content knowledge as a result of this activity.

Student Delta also showed remarkable gains in content knowledge. Her first essay was one paragraph about religious conflict in Jerusalem that ended, "I'm not very sure about what is it." Her second essay was a page and a half that started, "To bring peace to the Middle East, we have to resolve the problem of people who live there... Some of the problems began when the Jews were kick out of Israel, then the Palestinians took over Israel..." She continues to elaborate on the specific problems and concludes with her

solution about dividing the land and allowing each religion to have permission to visit their monuments in Jerusalem. Critical thinking as well as content knowledge are apparent in her second essay that were not present in her first.

Even a student who did not totally grasp the historical context was able to explain what they understood about the conflict. Student Alpha wrote, "...when there is a war between countries like Jordan and the PLO just fighting for Jerusalem and the war keeps on going and going and it won't stop." She might be confused about the combatants and who is fighting whom, but she clearly understands that this crisis is not new, and there are many people who are fighting for the sake of fighting. She concludes that "...some just wants war." This shows insight into the possible motives of the participants in the Middle East conflict and why it is not any easy conflict to resolve, demonstrating critical thinking of a fairly sophisticated level.

#### **ANALYSIS OF E-MAIL AND PROPOSALS:**

By examining the proposals posted by each country, it is apparent that the academic content and thinking skills of these English Language Learners improved over the course of the simulation. Syria and Jordan both had proposals in round one with absolutely no content and very little thinking in evidence. Syria wrote, "We think that the best way to make peace is to come to an understanding on which every one can agree. everyone who want's to throw it down, can bring it on."



now let's talk." There is a vague desire to begin discussion among nations, but there is no specific issue mentioned.

Four other countries wrote proposals in the first round that called for the division of the land to bring about peace. Saudi Arabia had the most accurate content when they proposed, "three pieces one for each religion Christians, Muslims, and Jews." The PLO suggested that because there are four religions, the land should be divided into four parts. They did not name the four religions, because they were confused by the inclusion of the Armenian Christians in the division of the city of Jerusalem.

Egypt's round one proposal was unique in that it proposed dividing the land in half between the Israelis and the Palestinians. There's was the only group to realize that the Christians in Israel historically had not been part of the violent struggle for power. Egypt also gave an excellent reason for their proposal, "...stop fighting for just a piece of land that is worthless than the lifes that have been took by anger and hate of regular civilians." According to this team of students, the value of human life and the violence done to civilians were powerful motivators to bring peace to the region.

Other points of content confusion were apparent in Israel's and Lebanon's opening proposals. Israel said, "...there would be no more wars between the PLO and the Muslims." They confused these two groups of people, and did not realize that they were both fighting against Israel. Lebanon's error was that their opening issue was that they

wanted to be independent. Somehow they had confused the plight of the Palestinians in the Occupied Territories as their own. This author did not intervene in these confusions, the intent being to see if the student interaction would bring clarification.

By round two, every group was beginning to show content knowledge increases. Lebanon started their second proposal, "To all the Middle East as you know we are free..." They had been able to correct their misconception by interacting with other teams in the simulation. The PLO was able to show in round two that they realized there were only three religions at issue in Israel. They proposed dividing "...Israel into three equal parts, one part for Muslims, the other for Jews, and the last part for Christians." This indicates an increase in understanding as a direct result of negotiating meaning with more capable peers. These students were operating in their Zone of Proximal Development.

Not all countries showed such great improvement in round two. Syria was now including some academic content in their proposal, but that content was not correct. They proposed, "...We can find a solution by putting down our weapons and try to divide the land into four countries..." Syria, and most of the countries involved in this negotiation, are not using weapons at this point in history, and this team was still off on the notion of four religions.

Egypt's team showed some insight in the second round into the international nature of the conflict between the Arab countries and Israel. "Are proposal is to continue with

the peace, between the Israeli country and its neighbors...And also we (all countries around Israel)..." This team realized that even though the focus of the conflict was on the Palestinian people, it was the Arab neighbors who could put the pressure on Israel to change their policies. This team was able to reflect on their nation's role in the negotiations, thus demonstrating thinking beyond what they had started with. They had been able to think like an Egyptian diplomat instead of a high school student.

Also in round two, Jordan added a piece of content knowledge and depth of insight to the negotiations. They said, "one of the problems in the middle east is people want to be herd. So they riot, and rock throwing. The way to solve it is to let the people talk, and see how they think we should solve it." This team brought up the specific events of the Intifada as an example of why the negotiators should accept input from the Palestinians. They made the connection between the violence they had witnessed in the video presentations and the frustration of the Palestinian people over not being listened to. This team was able to combine academic knowledge and critical thinking in a way no teacher could have ever planned. They used the multimedia input in a non-threatening context to go beyond the surface issues and risk making a statement over the computer network that they normally would not have made in a class discussion.

Another improvement seen in round two was the inclusion of visual messages to help explain textual proposals. Every team had access to a political map in the HyperCard® stack

that controlled the simulation. All they had to do was click on a button marked, "Maps" and they were sent to the map page shown below. They could then use HyperCard®'s drawing tools to make modifications to the map and post this map for all countries to see by clicking on the "Send This Map" button. They could view other countries' maps by clicking on the "Get a Map" button.

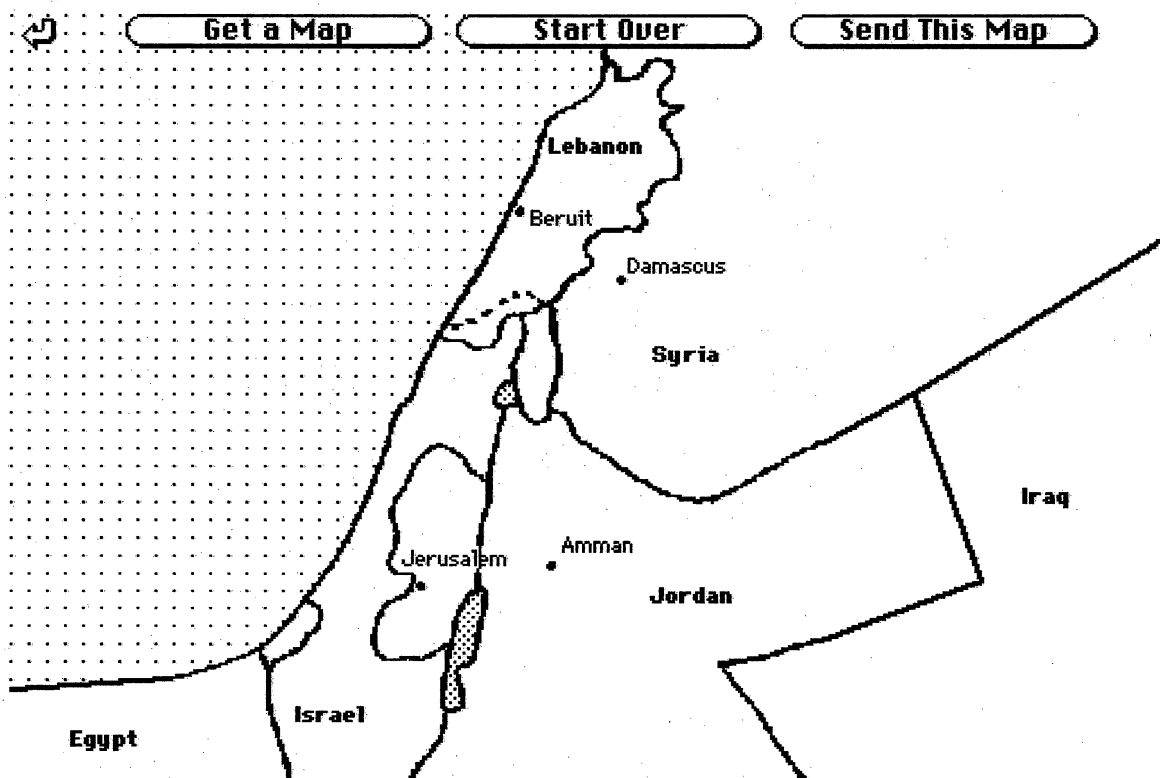


TABLE FIVE: Initial Map Screenshot

Lebanon was the first to use this medium of communication. They proposed dividing "the land into four parts. We are going to show you a map how to divided the land. Look at map leb2." (shown below) Even though the divisions were somewhat arbitrary and did not solve the major issues surrounding the occupied territories, the inclusion of this map showed that the team was making connections between

what they were saying in text, and the actual countries involved in the simulation. In their proposal they did not elaborate on why they drew the lines in the places they did, but again, This author was not going to intervene in the course of the simulation to see if student interaction could clarify their meaning.

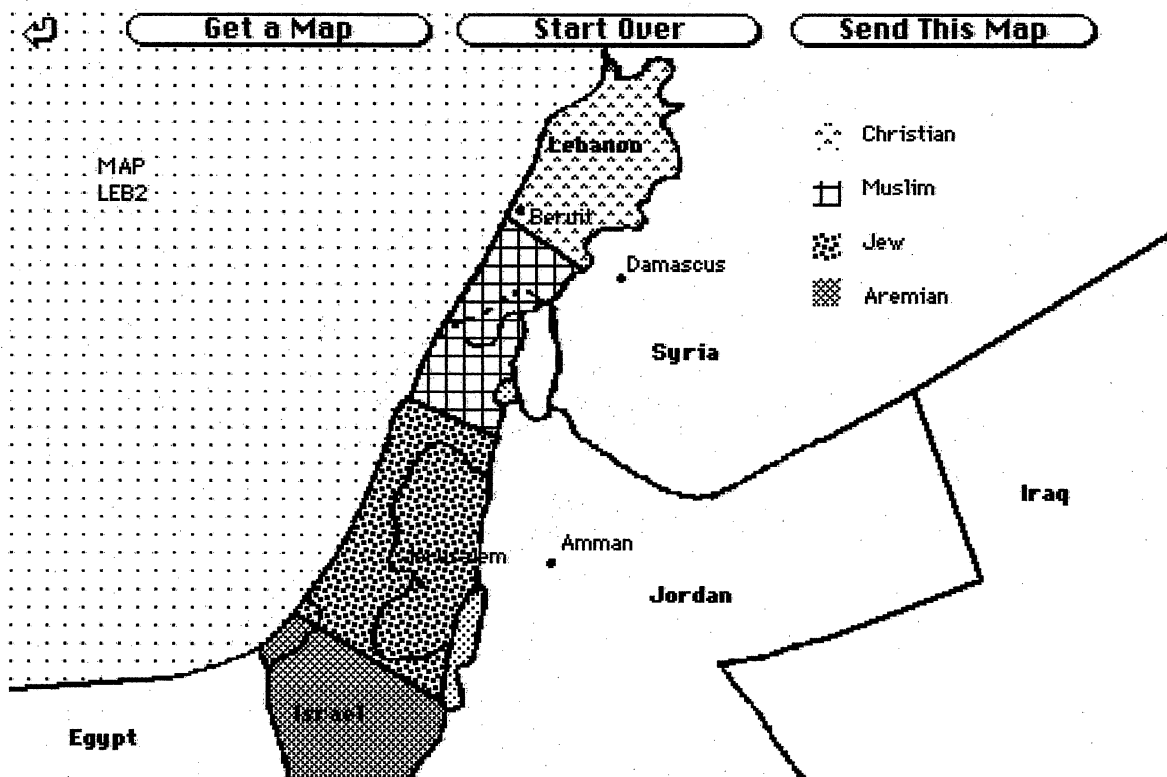


TABLE SIX: Student-Modified Map One Screenshot

In round three, both Saudi Arabia and the PLO referred to maps they had prepared for their proposals. The PLO map divided the region into three parts similar to Lebanon's map. Saudi Arabia took a different bent. They divided Israel into two countries, Israel and Palestenia (see map below). They said, "We believed that the best way to get it is by dividing the land into equal parts. One for each group Palestinians and Israelies." Again, they did not offer much reasoning for

their division, but they did evenly divide the controversial West Bank right down the middle, and even divided Jerusalem. This demonstrated the use of critical thinking in coming up with an acceptable compromise for both antagonists.

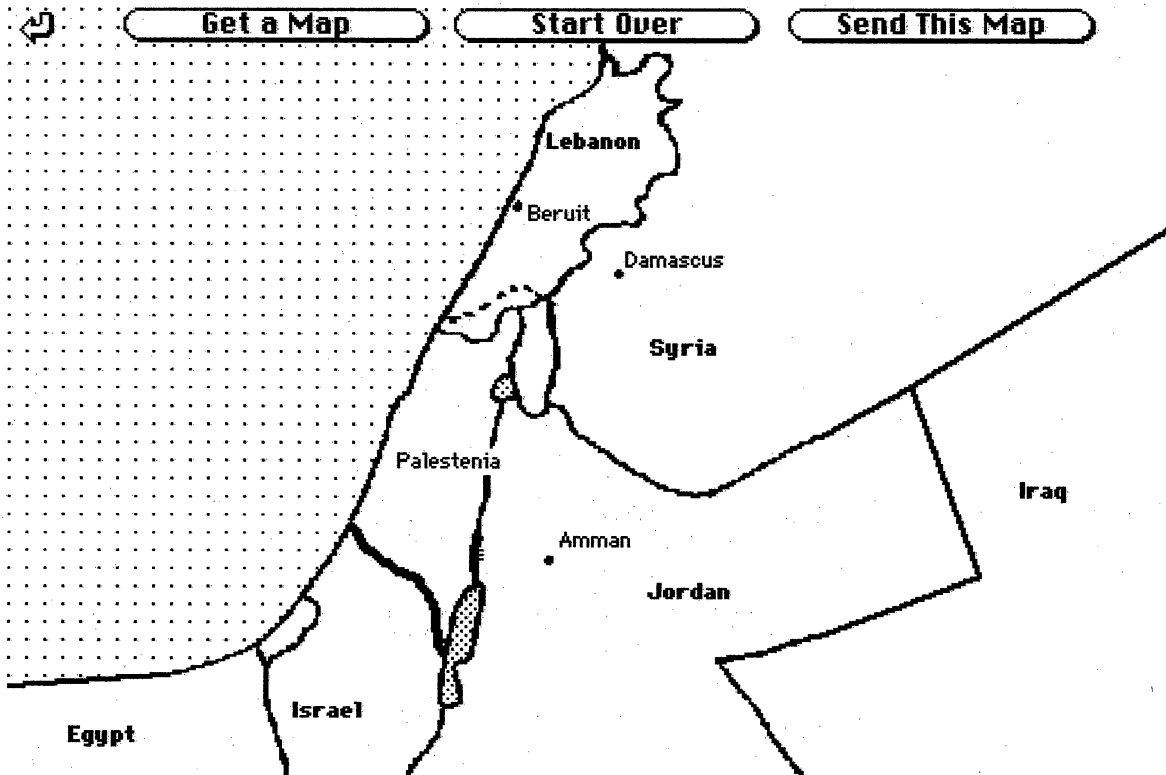


TABLE SEVEN: Student-Modified Map Two Screenshot

Other indications of content knowledge and thinking improvement were seen in the text of the third round proposals. Three of the country teams called for dividing the land. The PLO gave the reason that "We know Israel is important for three religions, so we think is better divide the land." This showed they had increased their content knowledge to realize that there were three religions, not four like they previously thought. It also showed that they were reasoning more about the knowledge they had acquired. They were now giving reasons for the divisions they were

advocating. As mentioned earlier, Saudi Arabia had gone beyond the three divisions to realize that there were two main combatants in Israel. Their third proposal was to divide Israel between these two groups.

Three of the country teams moved beyond the idea of dividing the country of Israel in their third round proposals. Egypt said, "In our last proposal we have said that dividing the land would, be the best way but we haven't think very much in moving the people arround, what the people is going to do, or anithing alike." This showed some metacognition, or contemplating of their own thinking processes. The team members were analyzing their previous proposals in light of the logistics of dividing the country. They realized that their first plan was not very practical, so they came up with a whole different approach, "So now we think that the best solution would be if every-religion respect the others. With out fighting for land,or other dum reasons." They changed their perspective and began to pursue a different solution to the crisis. They did not offer a very concrete way to accomplish this, but it was apparent that they were progressing toward a clearer understanding of the complexity of the issues they were dealing with.

Lebanon also showed a great deal in content knowledge increase as well as thinking skills in their third round proposal. They added a very specific fact to their proposal, "Well as you know that the problem in Israel is the muslem dome and the Jews wall." They were specifically mentioning the two sacred locations to the two major antagonists. The

Dome of the Rock is holy to the Muslims, yet was built on the site of the second Jewish Temple. The Wailing Wall is the only part of that temple that is still intact. The close proximity of these two shrines has caused a great deal of conflict over the years. The Lebanese team was able to use these facts to move away from the division that they advocated in the last round, and move toward a more integrative proposal like Egypt. Lebanon said, "We say that we should all get along and that the Jews should pray in peace and so do the muslim with out any of them interfering." Instead of dividing the land, this team wants the people to share these sacred areas in peace. This is another example of using historical knowledge in a critical manner to propose creative compromises.

By the third round, Israel was also echoing this cry to move away from division of their land toward living together. Without any intervention by the teacher, almost half of the groups had worked through the possible scenario of dividing the land among the combatants. They had examined the historical facts and applied reasoning that brought them around to the conclusion that political divisions were not a viable alternative. They then began to pursue a second course of action, integration. Because of time limitations, the simulation had to be brought to a close, but the students would probably have applied the same level of reasoning to this second plan in an attempt to make it work.

Analysis of the e-mail messages sent during the simulation provides evidence that content and thinking were



increasing over the life of the simulation. The first messages sent on April 1 were rough and undiplomatic. Jordan sent an offensive message to Lebanon in response to their opening proposal about wanting independence, "WHAT ARE YOU TALKING ABOUT!!!!!!!!!!" The PLO was much more diplomatic in approaching Lebanon's obvious gaffe, "We the PLO think you're wrong because you are free already." This was all the feedback Lebanon got on this mistake, but it was enough to get them to change their position by round two.

Other messages sent on April 1 were either indicators of support or disagreement with little or no reasons accompanying them. The PLO wrote to Egypt, "We the PLO agree with you guys." Some countries also included a restatement of the position they were concurring with. Jordan wrote to the PLO, "We think you are correct about spilting the religions.so power to you." This shows that the team had at least read and understood what the PLO had proposed, and what they were agreeing to.

The best messages on April 1 were specific and cited examples. Jordan said to Israel, "We like your idea about oil, but the way you are going to split the counry, how are you going to do it." Jordan told Israel exactly which part of their proposal they liked, and which part they had some concerns about. This kind of message could open the possibility for further negotiations.

By April 2, the messages began to be more content-laden. The PLO wrote to Israel, "...It would be divided into three equal parts, one is Jewish the other is Muslims and the tird

one is Christians." These kinds of content facts were beginning to give meat to the discussion. Instead of vague statements about everyone liking or not liking each other's proposals, teams were starting to discuss the relevant issues.

Also on April 2, Syria wrote to Jordan, "... and we also agree that we shouldnt have any riots." They were including this fact from the message they received from Jordan. Further negotiation of meaning was requested by Egypt from Jordan. They wrote, "Jordan we kind agree with you dividing the land, but not in four parts, maybe in half would be better." This was a very diplomatic way for Egypt to emphasize the similarity of their positions, while also trying to move Jordan away from the incorrect assumption that there were four groups fighting over the Occupied Territories.

Saudi Arabia was not as tactful when they corrected the PLO on this issue, "PLO You people should learn about history before you say theres 4 religions when we know theres only three they would be muslims, jews, and christians." This harsh remark was followed by a more diplomatic, "Don't think we disagree with what your saying because were muslims are selfs.we do agree but we just wanted to let you know you were making your point of view look bad by making that mistake." The Saudi team had figured out that they were Muslim brothers with the PLO and wanted to correct them on a point of accuracy. They were applying their content knowledge by using higher level thinking skills.

However there were still a number of messages that contained no content at all. Lebanon wrote two messages that were almost worthless. To Saudi Arabia they wrote, "we agree" and to the PLO, "we agree with you." With no explanation as to what this agreement was about, I am not sure the recipients would understand these messages. It could have been in response to a posted proposal, or an e-mail message they had sent to Lebanon. Israel sent some messages that were almost as lacking in content. To Egypt they wrote, "Ok, we are glad you agree with us. Thanks for your support!" This kind of a vague response could easily be misunderstood because the original message could have been sent on a different day. There was a lot of room for confusion because they did not say what the agreement was about. A team could have changed its position in the intervening time, but because the messages were vague, no one would know what was being referred to.

On April 3 there seemed to have been a breakthrough in understanding about writing specific messages about what each team was showing agreement about. The PLO wrote four messages telling countries that they agreed with their proposals to divide the land into three parts for the three religions. They were telling others what it was they agreed with. The PLO also wrote a message to Lebanon in response to the map they posted, "We the PLO have come to an agreement with you in dividing the land of Israel and we agreed with you about the map. Great idea!" They not only told them what they were agreeing with, but congratulated Lebanon for

doing such a good job explaining their point of view with a map as an illustration. Other countries began to send maps after they saw how effective Lebanon's map was. The use of visuals to the English Language Learners was so helpful, that they immediately latched on to the method as a way to make themselves understood better.

Even though they were still a little confused about the content, Syria began to be more specific in their messages also. They wrote to the PLO, "we syria agree in dividing the country in parts for religion but you say to divid it for muslim,jews,and christian but what about arminians???" They were able to take the knowledge that they had and formulate a clarifying question so that they could better understand the negotiations that were occurring.

Egypt later wrote to Syria and cleared up any confusion they might have had about the Armenians, "First of all there are only three religions in Israel because the Arminian religion is also Christian..." So Syria wrote to Lebanon, "we also think we should divide the land into 3 parts we just thought there were 4 religions OOPS?" The next day they continued talking about three divisions, and no one ever again referred to a four part division. This author never had to correct this content confusion. It was accomplished through student-to-student interaction through the course of the simulation. Overt error correction would have taken away the power of the student as negotiator and relegated them to student as passive recipient of information.

A new strategy in the negotiations came from Egypt on

April 3. They wrote to Jordan, "The PLO and us Egypt think that the land of Israel should be divide in to three equal parts for the three different religions in it. What do you think? Do you agree?" This represents a new level in persuasion not seen before in the simulation. The Egyptian team was trying to convince Jordan by showing that other countries agreed with them. By showing that the PLO was on their side, they hoped to add more weight to their argument. This showed higher thinking at work.

April 3 also became a breakthrough point for the Israeli team. They had the courage to stand against the flow of popular opinion and oppose the ideas to divide their territory. They began to send messages like this message to the PLO, "...Israel is to small of a country to divide. But we dont have a problem in sharing the land with Muslims, Jews and Christians." Their main objection is that their country is too small to divide into smaller parts. They began to try to move the discussion toward sharing the land and living in harmony.

As other countries began to discuss Israel's proposal they began to realize that the division idea was impractical. On April 4, Jordan pointed out to Lebanon, "What are you going to do if the golden, wailing wall, are in one area...Look at map JORDAN." They realized that any division was going to be impossible because of the proximity of the holy sites in the city of Jerusalem. They included the map as an attempt to show how dividing these areas would be impractical (see TABLE EIGHT). Even though the locations are

not accurately depicted on this map (they should have shown them all being inside the city of Jerusalem), it shows that the team was trying to use the map as an illustration to back up their textual argument that these shrines were all in the same area, and that dividing the land was not going to solve the problem.

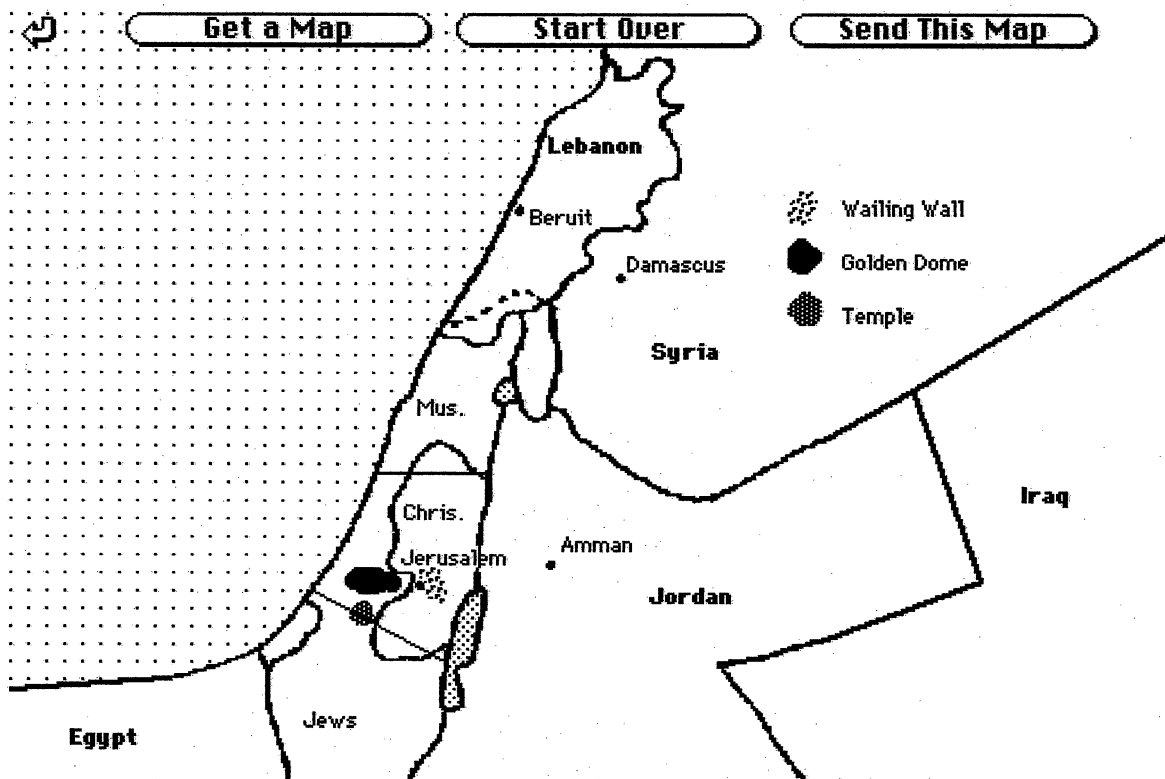


TABLE EIGHT: Student-Modified Map Three Screenshot

Egypt began to see the problems associated with the division and started questioning others on the logistics of such a plan. On April 4 they wrote to Lebanon, "...how do you expect the people from other religion to move over other places. Don't you think that there are going to be problems." They did not directly attack the division idea. They just raised a valid question about how the people would be moved and the problems this would create. They had to

have critically examined this idea and realized that it would be a nightmare to move that many people. They were able to take the content knowledge and apply it in a practical situation.

The Israeli team began to get curt with the teams that continued to press for division on April 4. They told Saudi Arabia, "Israel is too small of a country to divide into three different parts and if you really want this stupid war to end why don't you guys take the christians and muslims in..." They restated their objection to the division of their territory and offered an alternative. They asked Saudi Arabia to give up part of their country to house the other peoples. No one else had offered to let the Palestinians live in their country, yet Israel was able to come up with this idea on their own. They were able to apply their content knowledge in a creative manner to try to settle the conflict.

Lebanon was still holding on to the division idea, but they tried to come up with a way to reach a compromise. They wrote to Jordan on April 4, "...if dome is in Israel tetrretory let the mulem be in peace and let them worship in peace. and the wall is in muslem terretory do the same thing if these is not obey let them have a panishment." The Lebanese team still wanted to divide the land, and to settle the question about the holy sites, they wanted some form of punishment if anyone bothered another worshiper at their site. They were also becoming creative with the historical material in an effort to find a solution.

The next day of the simulation was April 14 because of the Easter vacation. This author was concerned that the break would have a stifling effect on the negotiations because students would have forgotten what they were doing. Instead, there were more messages with deeper content on the 14th than any of the previous days. Student teams seemed to have been recharged by the absence and ready to make some breakthroughs in the proceedings.

The PLO tried to solve the holy site dilemma by saying, "...we think that it is better if each religion have permission to visit the Dome and the Wall. What do you think?" Not only did they offer a creative solution, but they asked for feedback, offering the recipient a chance to respond. They used this strategy on all of the rest of their messages by including the line, "...Do you agree with us?" They realized that by asking a question, they were more certain to get a response.

The Saudi team offered the most reasoned objection to the "let's all just get along together" proposal from Israel that seemed to be gathering support from other countries. Saudi Arabia sent a couple of messages that argued, "They want to kill each other with else do you think they want to do..." and "Let's be realistic the of Israel will never get along." The Saudi team still supported the idea of dividing the peoples into different pieces of land.

Egypt seemed to have been fully converted to Israel's plan, and eloquently advocated this approach to other countries:



"As we have been talking and looking for ways to solve their problem, we think that the respect is the most important thing, so if we let the different religions discuss their problems they may be come out with solving their problems, and respecting the others, without dividing the land, don't you think that would be the best way?"

This team was reflecting on their own thinking processes and showing the other teams that their objective was to find a workable solution. They advocated respect instead of division, and then asked for feedback from the recipient. This demonstrated critical thinking in more than one aspect. In other messages they offered solid reasons for this plan by referring to the logistic nightmare of moving the people, the problem with the sacred sites and the small sections that would be required in division of the land. These were all valid objections that others had also raised, but Egypt used all of them in a concerted effort to win over other countries to their point of view.

Israel responded to Egypt's obvious support, "Thank you. At last somebody understand that dividing the land isn't going to work....so just spread the word around." Not only did Israel thank Egypt for their support, but they encouraged them to do what Israel could not do on their own: win over the other Arab countries to their point of view. This author believes that the students did not realize how similar their actions were to the real historical events that occurred between Israel and Egypt, but the parallel was striking!

Israel got more specific in their explanation as to how they were going to get the different religions to get along together. In a message to the PLO they said, "...So what we

plan on doing is setting a law. If we see more fighting those people that contributed are going to jail. Possibly killed. So we hope you change you're minds and help us make this work." They said they were going to legislate harmony between the groups and establish punishments for offenders. This was a first step toward finding a solution. Unfortunately either the PLO ignored this message, or did not have time to respond. There were problems with this proposal, and this author would be interested to see how long it would take the other teams to realize that this would be like having the fox guard the chicken house. But at least Israel was making specific suggestions about how they would bring peace to the region.

Lebanon was also converted away from the division idea. They sent similar messages to Syria, the PLO and Saudi Arabia saying, "we don't agree in dividing the land of Isael because thats going to couse more problems, because the people dont want to move." They took a stand, and gave a reason for their change. They even offered a word of encouragement to Egypt for their eloquence, "We agree nice aswer." It was obvious that alliances were being formed as more countries joined Israel in their proposal.

April 15 was the last day of the simulation. This author expected to see the best negotiations occurring. Syria stuck to their argument and even offered reasons for their stubbornness, "we syria think that dividing the land would be best because people already tryed to make peace and it didnt work so by dividing the land no one would fill

controled." Not only did they restate their position, they offered two valid arguments for why the "let's all get along" approach would not work. They brought up the historical argument that the people had not been able to get along in the past, and there was no indication that things were different now. They also pointed out that the issue of control, where one group was dominating another was not resolved. Both were good arguments full of historical relevance.

Saudi Arabia gave a polite reply to Egypt's excellent argument in favor of getting along, "...its just we do not believe they are really going to get along. Sorry but we do not think that is a good solution." They made their position clear and gave a reason why they could not support Egypt in a very diplomatic manner.

The PLO also held to their division argument. They restated their three equal parts division and allowing the visitation to the monuments. But they also left a door open so that they could check with their allies, "...but first we having talking about this with the other countries and they agreed with us..." A critical negotiating strategy is to always leave room for a position change if you find yourself isolated. The PLO team did not want to join Egypt, but they wanted to check with their allies to see if they had converted yet.

Egypt came up with another argument to support their approach, "As you know most of the times the people follow there leaders and if we can agree they can too..." Here

Egypt was trying to convince Jordan that if the negotiating teams could come to some agreement, the citizens that they represent would respect their leaders' desires and learn to get along with different religious groups. This was the first time this creative argument had been used in the simulation.

Israel was getting messages asking for clarification of their plan with specifics, so they wrote back to Saudi Arabia:

"Well our plan is to make a law saying that if theres more fighting that they -the peoples- will be sent to jail for at least 5 to 10 years in prison. but it's really not going to be prison they are gonna be doing all community service without getting paid. Do you agree? If not, why?"

Not only did they list the length of the punishment, but they made it beneficial to the community. Then they asked the Saudi team to give specific reasons why they could not support such a proposal.

Jordan refused to change their position. They responded to Egypt, "How do you know that they will not fight and start a war, if we bring them together to talk." They were afraid that trying to force these groups to share the land would cause even more violence. This was a valid argument, based on historical precedent. Jordan was not afraid to hold to their position, even when it was not popular. Part of this courage comes from the anonymity provided by the network, and the ability to delay an answer while they formulated their responses.

The most disappointing final responses came from Lebanon. They finished with comments like, "YOU KNOW WHAT I MEAN!", "We agree with you." "Why not." and "well have it your way." I think this group had given up on the negotiations because they saw that they were not going to change anyone's position. They even resorted to trying to deceive other teams. They told the PLO, "you are the only one that don't agree with us," when there were many teams that didn't agree. They were doing this as a last ditch effort. Even though they lacked content, these messages definitely sent a message to the other participants. It was apparent that the other teams were feeling some of the same frustrations as the Lebanese team. It was a good time to bring the simulation to a halt.

#### **WRITING SKILLS:**

Before beginning this unit, students had been instructed in essay writing. This direct instruction included practice in sentence and paragraph formation, including the three elements of an essay: introduction, body and conclusion. They had been instructed and practiced changing questions into sentences, and correct spelling, punctuation and grammar. These were the areas that would determine improvement in writing.

## **JOURNAL ANALYSIS:**

In the pre-test essay, not one of the students used the correct introduction-body-conclusion format. Most students used complete sentences, but their essays were so short, that many would not qualify as a complete paragraph. Most pre-test essays were only one sentence.

The most common grammatical problem was run-on sentences that reflected the disjointed knowledge base the students were operating with. Student Delta is an example of this problem: "I know that countries like Jerusalem, and Israel are having conflict about the peace, the religion is one of the big problems (like the dead of the 7 girls)." Delta had three thoughts that she was trying to express in this one sentence. But because she was not clear about the relationship between the three she included them all in the same paragraph. She tried to show that the deaths of the school girls that she had read about in the newspaper was somehow an example of religious problems. She did this by placing her example in parentheses, but offered no explanation about the connection. She would have been hard pressed to explain this connection, because the soldier who shot the school girls was an emotionally unstable Jordanian, who was not acting out of conviction.

The rough nature of these pre-test essays is also reflected in Epsilon's paragraph, "...And thats about it. oh yeah! also about, Mikkha. in Soudia Arabia, that the rock that the Angel gave to Mohammed is there." A totally

unrelated fact about Mecca that Epsilon picked up from a class discussion was tacked on to the end of her essay as an afterthought. She used a verbal conversational register as a transition, "oh yeah!" to show that this sentence was added probably a few minutes later after thinking about the question again.

After only two days of interaction with the multimedia presentations from the ABC News (1989) videodisc, everyone's essays were improved greatly. Some only wrote a sentence or two, but most wrote at least one complete paragraph in answer to the question, "Who is Right?" Some students even used the introduction-body-conclusion format. Student Delta used a crude form of this structure when she started her essay, "I agreed with the PLO, they are fighting for have their own country..." and then she ended, "I agreed with the PLO, because they are fighting for their land." The body of her essay gave specific examples that she had learned about this struggle for the land from the presentations.

Many students simply repeated their introduction word for word in their conclusion. Student Gamma was a little more eloquent in her essay, "I think the Israelis are more right over the land, there are fighting for." and then, "So for me the Israelis are right to fight for their land." At least Gamma changed the wording a little to give variety to her conclusion, while restating the same thesis.

Spelling and grammar were still major problems. The technical vocabulary was not where the greatest spelling problems were. Most students were spelling Israel,

Palestinian and Occupied Territories correctly. They had seen these words in the text and had them written in their journals to use as reference. It was common words like, "countrie," "oportunity" and "righ." that the students were misspelling. They had access to dictionaries to check their spelling, but many did not know that they had misspelled the word, and there was not enough time, or motivation, to check every single word. These periodic essays were simply a tool to focus their thinking while practicing their writing skills. This author did not think it important to correct their usage because of the focus on making their meaning clear.

Grammar mistakes were fairly common in these essays. Student Delta had perfect spelling and included an introduction, body and conclusion, but had numerous grammar mistakes. One problem was with capitalization of proper nouns, "israelites" and "arabs". Subject-verb agreement also seemed to be a problem, "Israel say that the PLO are making terrorism for Israel, but Israel don't want make peace with any country around them and they are making terrorism to the countries around Israel." She had assigned plurality to the nation of Israel and the PLO, probably due to the fact that there are many people within these groups.

Student Alpha also had clear ideas and proper essay structure, but many spelling and grammar errors:

"I agree with the PLO.

I chose it because the think that Palestine should have there own land. and in the clip it said that Palestine is there land. they were born there and should stay there if they wanted to. if there



is two countries fighting for a land or who land  
it's is it would probably be better if ..."

Even though her ideas were clear and argument strong, the repetitive (and sometimes incorrect) use of the word "there" was very distracting. And the tangled "it's is it" was even more confusing.

So even though there was a great deal of improvement in the style and structure of these essays, the grammar and spelling were still getting in the way of clear communication of meaning.

In the next essay, identifying the problems around the city of Jerusalem, not only structure, but also grammar and spelling showed remarkable increases in accuracy. Like many of the students, Delta wrote two complete paragraphs, each one expressing a separate idea. The first paragraph explained specific examples of why Jerusalem was important to each of the three religious groups. Then the second paragraph explained how she would divide the land among those groups to bring about lasting peace. A few minor grammatical errors did not distract from the meaning at all.

Student Gamma had more mistakes than Delta, but fewer than she had on the previous essay. She used an introductory sentence, "One problem in the Middle East is in Israel." She then explained what that problem in Israel was in the body of her paper. In her concluding paragraph she wrote, "My solution would be that they should just solve there difference and respect there different religion." Like student Alpha, she misused "there". Gamma also had a problem

with the plurality of the objects, like student Delta. These kinds of common mistakes could be used as points for direct grammar instruction by the teacher instead of going chapter by chapter through a grammar book. Starting from student characteristics when creating curriculum was one of the major findings from the literature review.

The final essay in their journal was the most impressive display of writing improvement. Everyone included at least a one sentence introduction, a paragraph or more body, and at least a sentence in conclusion. No one started with, "I don't know much, but..." On the contrary, many started their introduction like student Beta with, "What I learned from this assignment is..." Just the choice of wording showed a great deal more confidence than their pre-test essays.

Probably one of the best introduction paragraphs came from student Epsilon, "The problems that makes this contry full are many. In the following paragraph I will point out some of them." The function of this introduction is clear. She is going to tell us some of the many problems that these countries are facing. This helps the reader to see that there is even more than just the issues the writer is going to address.

The bodies of these essays contained various historical facts and examples to support the theses laid out in the introductory paragraphs. Grammar, spelling and other usage difficulties did not interfere with the meaning at all. Students were able to spell the content vocabulary because they were still able to use their journals as a resource.

The spelling mistakes still involved supporting vocabulary such as, "arround," "neighther," and "differen." The frequency of these misspelling is rare enough that it does not interfere with the meaning at all.

The most impressive part of the body paragraphs was the complexity of the language attempted by these English Language Learners. Student Beta used an excellent transition, "...That resulted in a big peace problem. Another problem is the occupied territories..." She used this statement to connect two of her examples in the body of her essay, making a smooth transition of thought.

Student Alpha gave structure to her body through the use of first and second, "From what I learned in communicating with other countries is first... Second when there is..." This allowed her to put two related ideas into her one body paragraph. These writing skills were never directly taught in this class. Either the students were instructed in other classes and they transferred these skills, or they picked them up from modeling readings and conversations in school or at home.

The level of vocabulary also dramatically improved over the course of treatment. In the pre-test the student had the same prompt that included vocabulary such as, "Intifada, PLO, Occupied Territories and Zionism." Because of lack of content knowledge, students did not use very many of these terms in their pre-test essays. In the post-test essays, these terms were used quite often and in the correct context.

Tertiary vocabulary also improved greatly. In the post-

test essay, students were using fairly advanced vocabulary to express themselves. Student Gamma used, "monuments," "neighther," "interfere" and "inaguration" in the body of her essay so that the reader would understand the exact situation she was describing. This was a big improvement from, "...I know that some people from Jerusalem don't like people from a different religion." The richer language of the second essay was much more descriptive and conveyed a great deal more meaning.

The concluding paragraphs fell into two categories. Many students ended like student Beta, "For my conclusion all I need to say is that I found out that making peace is very hard..." She and others focused their conclusion on the simulation activities and the solutions they tried to work out. Many discussed the division of the land among the three groups, and the difficulty of getting people of opposing points of view to come to agreement. These students were trying to apply the knowledge gained throughout the unit to a practical solution. They had accepted their role as international peace makers, and they were using this essay as a forum for explaining their actions. I believe they were fully engaged to the very end.

Many other students concluded their essays like student Alpha, "So this is all I learned in the section about the problems in the Middle East to have there peace." They summarized their essay by saying that the body contained everything they knew about the subject. Their conclusion was a simple restatement of their introduction in different

words. This was the simplest interpretation of what they had been taught about essay construction.

It was very clear that over the course of treatment, student writing improved in all areas. As they progressed through the activities, the writing samples contained in their journals showed a progression of improvement in grammar, spelling and other usage areas. The use of the introduction-body-conclusion was almost nonexistent at first, but by the end of the treatment period was being used by virtually all students.

#### **ANALYSIS OF E-MAIL AND PROPOSALS:**

The proposals posted at the beginning of each round showed a progression of improvement in writing. Syria's first proposal had correct spelling, but also many grammar errors, "...on which everyone can agree.everyone who want's to..." The only capital letter was at the beginning of the paragraph. They did not leave a space after the period, and the apostrophe in "want's" is not correct. By the third round, Syria was able to post a message that was more than twice as long, had a space after every period and only had two misspelled words, "sacret" and "diffrent." These improvements were made by the team with no overt correction by the teacher.

The team representing Egypt also showed improvement over the course of the simulation. In their first proposal, they had one long run-on sentence linked by commas. There were a

number of grammar errors and one spelling mistake, "whorthless." By the third round, they had cleaned their proposal up to the point where it consisted of two indented paragraphs. The first one restated their previous proposal and why they were abandoning it. The second paragraph explained their new proposal and why they had switched, "So now we think that the best solution would be if every-religion respect the others. With out fighting for land,or other dum reasons." The correct use of the period and spacing is an improvement. There were still spelling errors like the first proposal.

Lebanon also showed a little improvement, but not as much. Their first proposal contained grammar mistakes such as not capitalizing Lebanon. Their final statement also neglected capitalizing Muslim, but the statement was more than twice as long. It included this sentence, "We say that we should all get along and that the Jews should pray in peace and so do the muslem with out any of them interfering." They were using complex vocabulary and sentence structure with limited success. They were able to increase the quantity of writing with a little increase in its quality.

Jordan did not show much improvement in their proposals. There were numerous spelling and grammar mistakes in both their first and last proposals. Their round three proposal started out, "one of the problems in the middle east is people want to be herd. So they riot,and rock throwing..." Capitalization, spelling, spacing and sentence fragments make the meaning a little hard to decipher. They were able to

express some good ideas, but their language interfered somewhat with their communication.

From the e-mail messages sent during the course of the simulation, there was also writing improvement apparent. Syria started out writing their messages in all capital letters. They said they thought that would be a more effective way to get their point across because the class knew that all capital letters represent shouting. They were not told to stop, but by April 4 they had quit typing in all capital letters and began to use them only at the beginning of sentences. By the end of the simulation the only time they wrote in all capital letters was to make a point, "YOU PEOPLE LISTEN. How can you let..." Jordan followed a similar pattern. On the first day they sent out four messages in all capital letters trying to make their point. By the end of the simulation, the only other message they used this technique in was a message to Syria, "Syria, WHY CAN WE ALL GET ALONG. I know why..." The emphasis was used sparingly and appropriately.

The technique of using all capital letters at the keyboard can be an effective way of expressing facial and tonal communication that is possible in a face-to-face conversation, but not in written text. These teams were able to learn how to properly use this without direct instruction from the teacher.

Saudi Arabia's team picked up on this technique in one of their responses to Syria. The only message they wrote in all capital letters said, "WHAT FOUR SECTIONS THERES ONLY

THREE IDIOT." The use of undiplomatic language and all capital letters conveyed a message well beyond what the sentence alone could have done. This group had acquired a communication skill that that were able to effectively use.

Another improvement over the course of the simulation was proper spacing after punctuation. Jordan was a good example of this. On April 1 they wrote, "We like your idea about the oil, but the way you..." Many teams did not space after periods or commas in their first messages. By the last days of the simulation, most teams, like Jordan, had fixed this problem, "...they are killing each other, whats the differnts between..." Most teams were putting a space after every comma and period in their last messages.

One area where improvement was not apparent was in spelling. If a country began sending messages with proper spelling, they usually remained consistent. The PLO team's first messages were flawlessly spelled, "We the PLO disagree with you because the best way to find peace is by dividing Israel into four groups." They were correctly spelling some fairly complex words. At the end of the simulation they were still able to use difficult words with accuracy, "As we said yesterday, we think that it is better to divide the land in three equal parts..." There was no improvement because spelling was not a problem for them. The only words they misspelled were words that other teams had written to them, like "domme" (in reference to the Dome of the Rock mosque). They had never seen this word in text because it came from the video on Jerusalem.



Another example of a lack of improvement in spelling was seen at the opposite extreme. Lebanon was having problems with their spelling in their first messages, "...Israel is very importan not jast for the people of Israel but for the muslem to..." They were making mistakes in content vocabulary as well as support vocabulary. Their spelling did not improve by the end of the simulation, "...the land of Isael because thats going to couse more problems..." Their meaning was always clear, but the level of their spelling did not improve over time.

This lack of improvement in spelling can probably be attributed to the fact that the groups were focusing more on meaning than structure during this part of the simulation. They were involved in an authentic use of language that did not require accurate spelling. No one tried to correct other teams' spelling mistakes like they did content errors. They were playing the part of diplomats, so they saw no need to focus on all elements of language as long as the meaning was clear.

One area of improvement that was obvious was when a group would send similar messages to more than one country. This necessitated that they write the message over again. Subsequent messages usually corrected mistakes from previous ones. Israel was a good example of this. They wrote to Egypt, "Ok, we are glad you agree with us. Thanks four your support! Israel." Then they composed this message to Lebanon, "We are glad that you agree with us. Thanks for your support. Israel" They corrected three errors from the

first message by including "that", using the correct "for" and not putting a period after their signature. These are typical mistakes that students make in their writing, and they were able to correct them on their own. This was an effective way for them to revise their work without seeing it as language practice because of the authentic nature of the writing.

Another area that did not show improvement was the use of question marks. If a group used them properly in the beginning of the simulation, they continued throughout. Egypt was an example of this. On April 2 they asked Israel, "...how are you going to be with our people (muslims) when you get your country divide in half?" They continued to properly use question marks for the rest of the simulation. Whereas Jordan asked eleven questions throughout the simulation and only used three question marks (mostly in the middle of the simulation). This is another area where the teams felt the need to get the meaning across was not hindered by the exclusion of punctuation.

## **CHAPTER FIVE:**

### **CONCLUSIONS:**

This study has demonstrated that writing skills, academic knowledge and thinking skills of English Language Learners in a Specially Designed Academic Instruction in English World History class can be improved in many different ways. In particular, participating in a comprehensive learning environment that incorporates key principles of SDAIE and educational technology will enhance these areas of student learning. The use of a computer negotiations simulation as the culminating activity in this interactive learning environment has proven to be very beneficial. The following is a summary of my conclusions from this study.

One of the principles of SDAIE that was also critical in educational technology was that the activities must be student-centered. This project proved to be very student-centered. It met the four main goals of SDAIE because it helped the students learn English, academic content, higher-level thinking skills and promoted literacy. The project revolved around the learning objectives, not the technology. It was fairly simple in design, yet involved the students in cognitively demanding activities.

The learners' background knowledge was activated by creating shared experiences with the content before the simulation started. Students of varied linguistic proficiency were able to interact at their own level. The simulation acted as mediator to make these differences less

obtrusive. The levels of realism, challenge and curiosity were suited to the high school English Language Learner level. Almost all of the students who attended class during the course of treatment were fully engaged in the simulation right up to the last day. Students saw the activities as fun, and not as language or content practice. The environment did not revolve around grammar or content objectives, yet these areas showed great improvement during the course of the treatment.

Social interaction was another area where SDAIE and educational technology were similar. This simulation involved students in a great deal of social interaction. Students were often brought into their Zone of Proximal Development where the teacher and more often, more capable peers were able to assist them in the learning process. Students were actively involved in creating and negotiating meaning while they were participating in this activity.

Problem solving became the main focus of student attention, not the acquisition of arbitrary information. Students learned to operate as a cooperative team instead of isolated individuals in order to play the role of diplomats. They collaborated in many different ways to make themselves understood by their peers. The students had a high level of control over the progress of the simulation as well as a high degree of student-to-student interaction. The simulation became a conversational catalyst of real communicative practice, even though the students were not perceiving it as such. Students' literacy skills were being developed because

they were striving to express themselves in print in ways that they had never done before. This literacy went beyond just the words and often expressed the emotion behind the meaning.

One of the reasons this project was successful in improving writing skills, academic knowledge and thinking skills was because the learners saw it as authentic and meaningful language. Instead of filling in blanks on a worksheet, or writing a paper that only the teacher would see, students were motivated to write well and express themselves over the network because they knew that their work would be read by their peers. Instead of asking, "Do I have to rewrite this again?", they were involved in repetitive revision of their work without seeing it as such. Students used the journals they created for many different purposes. Some students used their journal writings to reflect on their own learning. Many used the journal as a personal resource. Others took notes and drew maps to help their understanding. These journals also became an important part of the authentic assessment of student learning. It was easy to look at student journals to verify the acquisition of content knowledge and writing skills as they progressed through the unit activities. Even the simulation itself was an excellent demonstration of student learning of content and thinking skills.

Both SDAIE and educational technology stress creating a safe environment that encourages learner risk-taking. This interactive learning environment met that requirement. There

was no overt error correction required from the teacher. Any correction that occurred came from more capable peers, and obvious improvement was shown in almost all areas. Shy students were able to express themselves without fear of embarrassment because they had the anonymity of the computer network to protect them.

The students were empowered by the simulation as international negotiators. They quickly abandoned the passive student role and became powerful diplomats with the fate of millions in their hands. No student participating in the simulation ever gave up and abdicated their control to the computer or the teacher. They took responsibility for their own actions throughout the simulation. The only students not empowered by the simulation were those that chose not to participate in it. These students did not attend class during much of the preparation and negotiation, did not join in any group discussion, and did not do any of the writing assignments. The relationship between computer-simulated negotiations and student motivation would be an interesting extension of this line of research.

The rich use of visuals was also critical in SDAIE and educational technology. In this unit, visuals played an important role in helping students understand and convey complex ideas and issues. Videodisc images, videotape images and maps were used by students to help them communicate with other learners. Students were able to make connections between the video footage they had seen days earlier while they were trying to solve problems during the simulation.

The images made abstract concepts, such as the Intifada, concrete enough to use as evidence in an argument they were presenting. The integration of text and graphics on the Macintosh© computers, and especially in a HyperCard© stack made the technology much easier for the students to use. All they had to do was click on a button labeled "Maps" to get to the map page.

SDAIE and educational technology both advocate allowing extra processing time for English Language Learners. This simulation allowed students to read a message from another team and then take all of the time they needed to understand it, formulate an answer and then type their response. The other teams were not sitting at their tables drumming their fingers waiting for a reply. There were many other things for them to do. Students' off-line discussions allowed the wait time necessary for them to be in control of the situation.

Finally, it is evident that the proper use of educational technology with English Language Learners can produce meaningful changes in a SDAIE World History class. Traditional World History curriculum alone cannot meet the unique linguistic and academic needs of this student population. Basic content knowledge and advanced critical thinking skills cannot be accessed by the English Language Learner without modifications to the delivery system and environment in which they are presented.

Using an interactive, student-centered computer based negotiation simulation is an excellent way of creating a

learning environment that facilitates language development around academic knowledge and motivates critical thinking. This would have to lead to a positive conclusion in answer to the main question of this research: "Can a computer-based role-playing simulation that engages high school English Language Learners in an international negotiation meet their unique language needs to facilitate writing improvement and increase academic content knowledge and critical thinking skills in a Specially Designed Academic Instruction in English (SDAIE) World History class?"

As educational technology becomes more affordable, and the population of California's public schools becomes more linguistically diverse, questions like the one addressed in this study will become even more important. Further research needs to be conducted into how modifying learning environments using the principles of SDAIE and educational technology improves other aspects of learning. One example already mentioned in this section would be the relationship between computer-simulated international negotiations and student motivation. Another example would be studying computer-simulated international negotiations and their effect on interpersonal conflict management skills that often interfere with high school students' schooling. Data from these studies would be very helpful in resolving the many challenges that confront educators today.



## **APPENDIX A: Student Alpha's Journal**

## Middle East Issues

3/24/97

Write a short essay explaining what some of the problems in the Middle East are, include the intifada, the Golden Heights, West Bank, Gaza Strip, Occupied Territories, Palestinian Liberation Organization, Israel, Jerusalem and Zionism

3/24/97

I really don't have any idea about the Middle East but I think in Jerusalem couple of girls were killed by soldiers and that about it.

Notes:

Palestinian people wanted to be free from Israel. Jerusalem has fought for their freedom. Capital of.. Religion is one of Jerusalem problems.

Notes. 3/31/97

1448 Jerusalem were attacked by Jordan. In 1967 There was another war 6th day and got Jerusalem back. (The 7th)  
Christians think Jerusalem is special because Jesus crucified there and the Muslim believe in the rock which Abraham died.  
In Jerusalem they did divide it (Arabs, Christians, Muslim, Jews) 4 parts.  
Jerusalem is a holy city, it's dome (Muslim) wall (Jews)

3/31/97

Summary

The issue or the problem in Jerusalem are with four different religion.

They who is the people of Muslim, Jews, Arabs and Christians want their own piece of Jerusalem. The Jews want the wall. Muslim have the dome. The Christians think Jerusalem is special because Jesus died there and Arabs I'm not sure. Jerusalem always being attacked

These are my example of the problems in Jerusalem.

4/4/97

The main problem is in Jerusalem The people (Muslim, Jews, and Christians) wanting to have their own land because some parts of Jerusalem have

the wall, for the Jews. The dome for the Muslim and Christians they think the dome is special because Jesus crucified there. They like the Jordan comes and attack Jerusalem just to get the land.

For my solution I think is they should come up with an agreement to split the land up and be free so they don't have to be push around. The land should be divided so the people of Jews, Christians, Muslim believe in whatever. That is my solution. We should strike on it and agree.

## Land - PLO Background

- 3-25-97 - the PLO said that all Jews (terrorists), living in Palestine after 1948 must leave.  
- the Partition Plan for Palestine by the United Nations in 1947 said Palestine should be divided into two countries, one Jewish and one Arab state.

3/26/97 The infiltrators are trying to fight against the Israelis and Israelis take over.

I. ~~we~~ agree with the PLO.

I chose it because they think that Palestine should have their own land and in the clip it said that Palestine is their land, they were born there and should stay there if they wanted to. If there

is two countries fighting for a land or who land it's is it would probably be better if they were divided up. The Palestine wanted to be free from Israel and I think every one in the world who ~~at~~ country should be free.

That is why I agree on the PLO.

3/27/97 How long ago was about

Notes King David bought the land and made Jerusalem the capital. Babylonians came in and conquered Jerusalem. 70 years later Romans came in and ruled and destroyed Jerusalem. Then later Muslim ruled Jerusalem. Jerusalem is important to the people because Jesus

3/30/97 died there for the Christians. (King.)

● Mos is what they call their church. In World War I British took over Jerusalem. Germany tried to make Europe to be their slaves. 1948 the United Nations wanted to give <sup>Jews</sup> ~~Jews~~ ~~Israel~~ to be free have their own land

peace



4/15/97 Easy Test.

In this section I have learned about what a certain country wants, such as if they wanted peace, land or war.

From what I learned in communicating with other countries is first some of them want a war. Some think it would be best to divide the land into three parts so there could be peace so that no one could control the people. Second when there is a war between countries like Jordan and the PLO just fighting

for Jerusalem and the war keeps on going and going and it won't stop. In one of the messages one of the group has said "stop the war and throw down the weapons. Would the people listen maybe some but some just wants war.

So this is all I learned in this section about the problems in the Middle East to have their peace.

## **APPENDIX B: Student Beta's Journal**

### Middle East Issues

3-24-97 Write a short essay explaining what some of the problems of the Middle East are. Include the Intifada, the Oslo Accords, West Bank, Gaza Strip, Occupied Territories, Palestinian Liberation Organization, Israel, Jerusalem and Zionism.

3-24-97 Well I would have to say that I do not know anything about these things. The only thing I kind of remember is that Muslims, Hindus and Jews fought for Jerusalem. They all

wanted to take over. Even though  
Jerusalem is a small piece of land

Hitler wanted to kill all the  
Jewish People because he blamed  
them for their problems. He took over  
the City of Israel and other cities.  
The Jews came back to Israel they  
had a problem because while they  
were gone the Palestinian people  
took over and change it's name  
to Palesitan. The 3 Pieces of land (Gaza strip,  
West Bank, Golan Heights)  
are called the occupied territory

Well my Group is going to talk about the  
Intifada in the PLO. Nancy, thin, Joe, ME.

Intifada in the PLO. #1 Video clip

In December 1987 the Palestinians  
living in the west bank and Gaza Strip began a series  
of strikes and riots to protest

Israel's Policies.

PLO = Palestinian Liberation Organization

We chose Video Clip #1

because it ~~show~~ show riots  
and people fighting. we  
thought it would be a good  
way to let people know

what's going on on the  
Intifada in the PLO. But also because it  
has a good name

3-26-97

Occupied territory  
[Gaza Strip  
West Bank  
Golden Heights]

In 1967 the Six day war took over the occupied territories by the Israelis.

All of the countries that surround Israel ~~are~~ are Arab they are muslims. They do not want Jewish to live in a country near them the occupied territory is

Controlled by Israel but most of the ~~the~~ people that live there are Palestinian. The Antifadah that strygle is that the Palestinians are rebeling because they want to defend their rights. They want to fight for what's them.

By seeing everything I see and heard I agree with the Palestinians.

First of all because from my point of view



ALLURE

My Solution for this Problem would be to divide the gland into 2 equal parts and give one part for each one.

4-15-97 S.A. Test

are many problems like  
in Israel were people  
are fighting for ~~the~~ <sup>the</sup> peace  
of land. Everyone wants it.

collected in Israel were people piece  
for are fighting for ~~the~~ peace  
of land. Everyone wants it ~~the~~ Jewish  
the Jewish  
the Jewish  
the Jewish

~~That~~ That resulted in a big Peace Problem. Another Problem is the occupied territories in which both Israelis and Palestinians want to take Over Israel.

I learned that even if you think making Peace is not hard and believed you could make it with your ideas you could not do it without affecting anyone. Unfortunately getting

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to an agreement with other countries is very hard. There seemed to be many solutions but it's hard to know which one is the best.

— For my conclusion all I need to say is that I found out that making Peace is very hard and that even though everyone has some kind of solution ~~if~~ you could not achieved your goal without coming to an

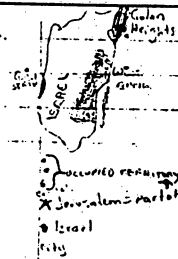
## **APPENDIX C: Student Gamma's Journal**

## Middle East Issues:

Write a short essay explaining what some of the problems in the Middle East are, include, the Intifada, the Golan Heights, West Bank, Gaza Strip, Occupied Territories, Palstinian Liberation Organization, Israel, Jerusalem and Zionism.

It's not much but, I know that some 824-97 people from Jerusalem don't like people from a different religion.

During WW II Hitler blame all Jewish, for Germany problems. and he let them go to Israel so they can get together in peace.



## Land PLO Background

-2-

- United Nations resolutions 242 (Nov. 22, 1967) required the "Withdrawal of Israel armed forces from territories occupied in the recent conflict".
- The PLO claims that the Camp David Accords (1978) did not ask the Palestinians, what they wanted only Egypt & Israel sign it.
- PLO, Palestine Liberation Organization.
- Video: Palestinians should be free in their own land.

I liked the video because it talks about what we are talking about. The Palestinians need to have their own land to feel free. And don't have to do anything with Israelis.  
PLO Executive Council George

Occupied territory - Golan Heights, West Bank, Gaza Strip 26-97  
1967 Israelis took over, Arab countries don't want a Jewish country in the middle of their land. The Intifada; The Palestinians are revolting against Israelis, and the soldiers are just to protect others but they can't. ~~I think the soldiers are not right, because when they take the land~~ 3-28-97

- Since 3,000 years ago the Jews owned the land of Jerusalem, and made it the Capital of Israel. King David made that land. Jerusalem was burn 2 times 600 years later Mohamed. Babylonians conquer the city, and destroyed for the first time. After they rebuild Jerusalem, then the Romans destroyed for the second time Jerusalem. Continued

Period 2  
3-26-99

Short Essay Who is right? Israelis PLO?  
I think the Israelis are more right over  
the land, there are fighting for.  
Because when they leave it, they didn't mean it  
to leave it for ever, or for other can take  
over it. They just leave it may be because  
they had a powerful reason, and the Palestinians  
get that opportunity to get that land  
for them. An example would be, if you  
buy your own house, and you need to  
do some thing else, some other place away  
from your house, if someone get it, when  
you come back it's still going to be yours.

because you own it. And the people living  
there need to leave, because they knew  
that you were going to return some day.  
So for me the Israelis are right  
to fight for there land.

Then the muslims come and Mohamed ascend to heaven.  
Jerusalem is important to the Jews, Muslims, and Christians.

3-31-97

The dome of the rock, is where the Mohamed had ascended to heaven, this is in Jerusalem, which is so sacred for the muslims. 20th century. 1917 Jerusalem fell. W.W.I took over Jerusalem. Germany conquered Europe, and many Jewish people were there, so after W.W.II. the Jews who survived they tried to go back to Israel. But the muslims are there ruled by Britain. 1948 Zionism (modern Jewish nation). David Ben-Gurion gave the Jews their country. In 1947 the British rule was over. But Palestinian didn't like it.

In 1948 the country was attacked by the countries surround, just one day after, they inaugurated as a free country. Six countries against one. In the six day war the Jewish people got back the piece they lost. In 1967. The dome of the rock a sacred thing for muslims is just behind the walling wall a sacred thing for the Jews; and these cause a lot of trouble. Three groups of people agreed that Jerusalem is sacred for them. Jerusalem has been divided in quarters,  $\frac{1}{4}$  Christian,  $\frac{1}{4}$  muslims,  $\frac{1}{4}$  Jews,  $\frac{1}{4}$  armenians. This is what they think is the solution.

3-31-97

What is the Problem with Jerusalem.  
The problem with Jerusalem, is that  
is a holy city for different religions.  
Jerusalem is a holy or sacred city for  
different religions who don't get along, with  
each other, and each religion or group of  
people, want the land for themselves. But  
like there is where, the other's groups  
have they holy thing that they believe  
also, there are always in problems with  
the others. They try to solve it by  
dividing the land in to pieces, where each  
religion can pray for there holy thing.

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That is the problem with the city of  
Jerusalem.

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#### ^ PROBLEM ^

9-4-97

One problem in The Middle East is in  
Israel. In Israel are different religions,  
fighting for the land, that they said  
that it belongs to them (each religion) but  
these problem has going far, because the  
people don't just argue, they kill each other.  
And they also want to drive out the people  
from different religion. And there will be  
any solution until they stop fighting.



and get along with each other.

### "SOLUTION"

My solution would be that they should just solve their difference and respect there different religion.

4-15-97

### Essay test

What are some of the problems in the Middle East, including the Intefada, plan Heights, West Bank, Gaza strip, Occupied

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territories, Palestinian Liberation Organization, Israel, Jerusalem and Zionism.

Well all started when the Jews lived in Israel 3,000 years ago, and a king (David) made it sound as a state with a capital called Jerusalem. The city was completely destroyed 2 times one by the Babylonians and one by the Romans. In the first time, the Jews return, but the second time, the land was taken by the Palestinians, and the fight for land and religion started when the Jews came back to get there land. For the land they fight because they have monuments from some one that they believe and they prayed.

and each of these things is situated in the same land (Israel) but different spot. And for religion, because neither of the religions, wants to be together or a different religion to interfere in their beliefs. So they think the only way to solve this problems is to divide the land in pieces for each religion. The Occupied Territories are pieces of land that Israel been taken, when ever they get invaded by the countries around and can protect himself. The Zionism is when the Jews get there country but still was ruled by British.

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The country of Israel affected by the six countries around just after the day of invasion, these was called the six day war. And the PLO is that the Palestinians revolt against the Jews to get there own land for them selfs

## **APPENDIX D: Student Delta's Journal**

## Middle East Issues

3/24/97

Write a short essay explaining what some of the problems in the Middle East are, include the Intifada, the Golan Heights, West Bank, Gaza Strip, Occupied Territories, Palestinian Liberation Organization, Israel, Jerusalem and Zionism.

March 24, 1997

I knew that countries like Jerusalem, and Israel are having conflict about the peace, the religion is one of the big problems. I read in the news paper that (like the dead of the 7 girls.)

Israel on Jerusalem were protesting, because the government want make one of the holy thing that they have about the country, the war why were about what is it.

Hitler try to conquer Europe, and he kill a lot of people just for conquered the land in country when the Jews went out of Israel, the Hitler's land were Israel in Libya, Trip, Sudan, Ethiopia, West Bank, one part of Israel, but

they are called occupied territories, because the Palestinians are the people who live there. The other people who live there are Jews. Jerusalem is the capital of Israel and is part of the West Bank.

Who is right? Israel or the PLO (palestine liberation organization)?

Netanyahu is prime minister of Israel

The PLO is from part of the other side of the Jordan river

## In the Holy Land "Ure'u"

They are in war, the people killing each other. Jews like fighting for religion, but they are fighting for land. Jews, Muslims, Christians considerate. Israel like America, land, Jews did show. Mohammed, Abraham, 'imperial' people start all over. That's not really a war because the people attack the soldiers. Israel, and violence. That's not a war as people revealing, but it's not a really war.

March 25, 1997.

Tenurem - PPO

① - The King David Hotel in Jerusalem were British soldiers but was blown up by Irgun in 1946, within 91 people.

② - Deir Yassin was a Palestinian village near Jerusalem where the right-wing Zionist (Jewish) paramilitary group, Irgun killed Arab civilians in April 1948.

Terrorism = the use of force or threats to

March 26, 1997.

Hand # PLO #

The Palestine fight for have their own country, and the guys wanted take over them.

terrorism in Israel.

The way that the Palestinians make terrorism to them, and American are doing this too.

Intigada Israel #

They say that is difficult go outside and don't be hurt by Palestinians, they

Argun want Israel for the Jewish people

The Israelis don't want make peace with their people, and at the same time they leave the countries around them.

- Introduce the group
- Introduce the video
- Explain the video
- Explain why we chose video #3?

update.

country. Egypt, Jordan, Syria and Lebanon  
 they are all arab, most of them are  
 muslims they don't want a Jewish  
 people in the middle of them. Israel  
 controlled the occupied territories, but  
 the palestinian people lived in the cities.  
 Israel say that the PLO make the  
 terrorism. The palestinians kill the people,  
 they invaded a boat, they kill a lot  
 of people in an airplane, and kill 12  
 children from Israel. They do this  
 because they want take over the  
 land, they want get the land from them.

Israel controlled the occupied territories,  
 invaded in 1947, they took over this  
 March 26, 1997.

say that the arab and palestinian and  
 Israel ~~land~~ =  
 the arab want during the israeli  
 people and, they say that Jews don't  
 believe in suicide. The arab don't  
 want the Jewish people in the israel  
 land.



and Israel invaded Lebanon, because  
 Lebanon don't want them in Israel.  
 The Christians, Palestinians  
 are leaving.

I agree with the PLO, they  
 are fighting for their own country,  
 the Israelis want out of Israel and  
 now they want their land. Israel  
 invaded the occupied territories, and  
 now they controlled that territory. The  
 countries around Israel don't want the

Jewish people in Israel. Israel say  
 that the PLO are making terrorism for  
 Israel, but Israel don't want make peace  
 with anybody around them and they  
 are making terrorism to the countries  
 around Israel. The arab don't want Jewish  
 people in Israel land.

I agree with the PLO, because  
 they are fighting for their land.

March 27, 1997

The king David pay for Israel and he made the capital which is Jerusalem.

Babylonias attack Israel and they destroyed Jerusalem, and kill the people, and they a group of Jews became and they rebuilt the city again in then later the Roman pick out the Jews people of Israel. And the muslims take over Jerusalem, but the romans destroyed

Jerusalem for second time, and then the muslims take over Jerusalem.

For the Christians Jerusalem is very important. That city is important for a lot of people of different religions.

For the muslims Israel is important, because in Israel were a rock, and they believe that mohammed went to heaven from.

that rock. they built a building around the rock. In World War I British took over Jerusalem. In World War II, Germans tried to conquer Europe. The Nazis tried to kill the Jewish people. In 1948, David Ben-Gurion gave freedom and land to the Jews. In 1948 they were attacked by the countries around them, the day after of proclaim

freedom for Jewish people. In 1967 was another war called the six day and the occupied territories went back to Jewish people. One of the most sacred was the dome which is right next to the wall. The Christians think that Jerusalem is holy because Christ lived there. They divide it in four parts one for the Jews, one for Muslims, Christians, and one for armians. This was the solution about all these problems.

The dome is important for the muslims,  
the wall is important for the jews.

The problem in Jerusalem is  
that 3 different religions want Israel  
because it is important for them in  
different reason. Christians, Muslims,  
and jews want the land of Jerusalem,  
but after a lot of fighting they

decide divide Jerusalem in 4 quarter  
one for each of their religions.

April 2, 1997.

The PLO think divide Israel in  
tree equal parts, 1 for muslims, 1 for  
Christians and armenians and one for  
Jewish people.

April 4, 1997.

I think the situation of all this is dividing the land, and three parts, one for Muslims, Jews and Christians. In the classroom, in doing the 2 round, we (all countries) agreed with divide Israel into three equal parts, one for each religion. And I think, that ~~that~~ you we can make peace in the middle east.

Israel, this land is very important to different religions, Muslims think it is very important because Mohammed went to the heaven from a rock which is in the capital of Israel. For Jews Israel is a holy land and a wall which way is important to them. Christians, Israel is important because Jesus lived there.

April 4, 1997

## Essay Test

2<sup>nd</sup> period

To bring peace to the Middle East, we have to resolve the problem of people who live there in the Middle East, resolve the problems of the countries.

Some of the problems began when the Jews were kick out of Israel, then the Palestinians took over Israel. Years later the Gaza Strip, Golan Heights, West Bank, are occupied by palestinian people but ruled by Jews people these land are called the occupied Territories! But the countries around Israel do not want Jewish people in Jerusalem close of them. For Jews, Muslims and Christians, Jerusalem is very important to them, so they are in a war, but not exactly an a war because is the people throwing rock to the other people and the police. In Jerusalem were three monuments the Walling Wall, the Golden Dome and the Temple each one is very important for the three religion and that's one of the problems between them.

I talk about this in class and  
 I think that the answer is divide  
 the land in three parts each one for  
 each religion, muslims, jews, and christians.  
 I divide the land and then each religion  
 has a permission to go to visit their  
 monuments or graves. In the class we  
 talk about this idea with the other  
 countries and most of them agreed with  
 the idea.

## **APPENDIX E: Student Epsilon's Journal**



324-97

### Middle East Issues

Write a short essay explaining what some of the problems in the ~~east~~ Middle East are, include the Intifada, the Golan Heights, west bank, Gaza Strip, Occupied Territories, Palestinian Liberation Organization, Israel, Jerusalem, and ~~Zionism~~ Zionism.

I know a little of the Middle East. {324-97} like there are problems between religions. And that's about 17. ish years ago about Makkah in Saudi Arabia, that the rock that the Angel gave to Mohammed is there.

notes The occupied territories are the west bank, Golan Heights, and Gaza Strip. is where the Palestinians live. Jerusalem is the capital. → →

~~Yasser Arafat~~ is Prime minister of PLO, and ~~Moshe~~ Yehonatan is prime minister of Israel.  
Palestinians are rebelling against Israelis because  
Palestinians wants

- 3-26-97
- The occupied territories are where the Israelis live there. They took it over in 1967.
  - All the countries around Israel don't want a Jews country in the middle of Arab countries.
  - Palestinians wanted to get attention so they were doing terrorism things.
  - The intention is that Palestinians are rebelling because Jews are claiming there land.

I think that Israel is right because its their land and they left because they had to leave. So when they came the Palestinian were there.  
So I think they should share the land.

- 3-31-97
- In Jerusalem the Rock where mohammed descended to heaven.
  - In world war I. british got control of Jerusalem.
  - Germany, and France tried to take over Europe.
  - 1948, David Ben-Gurion gave Jews there own country.
  - 1948 Jerusalem was attacked by the countries around them. Jordan got the city of Jerusalem.
  - In the sixth day war Jewish people got back their land. (1967)

- Behind the wall is the dome of the rock.
- They divided the ~~city~~ city for all the religions. ~~2~~ Part for the Christians, Jews, Armenians, and muslims.

3-31-97  
The problem with Jerusalem is that, its a holy city for many religions. But each have diferent reasons why its holy. ~~and~~ Some of each religions sacret bilding are right hex to each other.

In conclusion I think that religions, and because there are four diferent ones. one of them will give it up. so that creates a big problem.

#### Jerusalem

4-2-97

One of the problems is "Jerusalem". in this city you find ~~to three~~ <sup>three</sup> diferent religion. Muslims, Jews, and Christians. There are also some holy places for each religion, and all of those places are too close together. So many times there are conflicts between religions.

I think that the only solution to this problem is to seperate them. If they cant live together and share the land. They will have to live inside bowdories. And ~~each~~ <sup>each</sup> religion could do what ever they want with there Peace of land. Thats what I think the Solotion is.

SA Test 4/15/97

The problems that makes this Contry full are many. In the following parograph I will ~~name some~~ point out some of them.

These probles are the occupied terretories. ~~these~~ these are teretories were the Israelies live. The Golan Heights, west bank, and The Gaza Strip. The Palistinian Liberation Organazation (PLO) are the ones that want to get the israelies out of the contry. they create ~~riots~~ riots in order to scare them away. Israel is were Israelies lived, but when they left the Palistinian People came and took over the hole contry of Israel. So when they came back they wanted Israel back. In ~~israel~~ ~~israel~~ is the city of Jerusalem.

In this city there are many people. also it a holy city for muslims becouse of mohadden whent to heaven there. Christians becouse thats where Jesuscrise lived. and Jews becouse thats the country that God Promise them. So Israel is holy ground for many, and it can torn in to a battle field any time.

In conclusion this is what I learn from lecture. I also learn that a solution coul be another one that splitting the land between Muslims, Jews, and Christians.

## REFERENCES:

- ABC News Interactive. (1989). Understanding Our World: In The Holy Land [videodisc]. Warren, NJ: Optical Data Corporation.
- Apple Computer, Inc. (1987). HyperCard 2.1 [Computer Software]. Cupertino, CA: Claris Corporation.
- Baltra, A. (1990). Language learning through computer adventure games. Simulation and Gaming, 21(4), 445-452.
- Belisle, R. (1996). E-mail activities in the ESL writing class. The Internet TESL Journal, 2(12), 1-9.
- Bermudez, A. & Palumbo, D. (1994). Bridging the gap between literacy and technology: Hypermedia as a learning tool for limited English proficient students. The Journal of Educational Issues of Language Minority Students, 14, 165-184.
- California Teachers of English to Speakers of Other Languages. (1997). Position Statement on Specially Designed Academic Instruction in English. Glendale, CA: CATESOL.
- Carrier, M. (1991). Simulations in English language teaching: A cooperative approach. Simulation & Gaming, 22(2), 224-233.
- Chamot, A. & O'Malley, J. (1994). The CALLA Handbook: Implementing the Cognitive Academic Language Learning Approach. New York: Addison-Wesley.
- Collier, V. (1995). Acquiring a second language for school. Directions in Language and Education, 1(4), 1-14.
- Cornell, C. (1995). Reducing failure of LEP students in the mainstream classroom and why it is important. The Journal of Educational Issue of Language Minority Students, 15, 1-22.
- Crookall, D., Coleman, D., & Versluis, E. (1990). Computerized language learning simulation. In D. Crookall and R. Oxford (Eds.), Simulation, Gaming, and Language Learning (pp.165-182). New York: Newbury House.
- Diaz-Rico, L. & Weed, K. (1995). The Crosscultural, Language, and Academic Development Handbook: A Complete K-12 Reference Guide. Boston: Allyn & Bacon.

- Estrin, H. (1993). Teaching Minority Students to Write Effectively. Bloomington, IN: ERIC Clearinghouse on Reading, English, and Communication. (ERIC Document Reproduction Service No. ED 358 487)
- Egbert, J. (1996). Analytic and systemic analyses of computer-supported language learning environments. Teaching English as a Second Language-Electronic Journal. 2(2), 1-24.
- Fichtner, D., Peitzman, F. & Sasser, L., (1991) What's fair? Assessing subject matter knowledge of LEP students in sheltered classrooms. In Peitzman, F. and Gadda, G. (Eds.), With Different Eyes: Insights into Teaching Language Minority Students Across the Disciplines (pp.143-154). Los Angeles: California Academic Partnership Program, UCLA.
- Freeman, D. & Freeman, Y. (1988). Sheltered English Instruction. Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 301 070)
- Freeman, D. & Freeman, Y. (1992). Whole Language for Second Language Learners. Portsmouth, NH: Heinemann.
- Hornick, K. (1986). Teaching Writing to Linguistically Diverse Students. ERIC Digest, Number 32. New York: ERIC Clearinghouse on Urban Education, (ERIC Document Reproduction Service No. ED 275 792)
- Hubbard, P. (1991). Evaluating computer games for language learning. Simulation & Gaming, 22(2), 220-223.
- Huss, S. (1990). Using Computers With Adult ESL Literacy Learners. Washington, DC: National Clearinghouse on Literacy Education, (ERIC Document Reproduction Service No. ED 343 462)
- Jones, K. (1991). Using computer-assisted simulations and avoiding computer-hindered simulations. Simulation & Gaming, 22(2), 234-238.
- Kinsella, K. (1993, October). Promoting Rapport, Interaction, and Active Learning in a Multicultural College Classroom. Paper presented at the Institute for Teaching and Learning 1993 College Teaching and Learning Exchange, San Jose, CA.
- Law, B. & Eckes, M. (1990). The More Than Just Surviving Handbook: ESL for Every Classroom Teacher. Winnipeg: Peguis.

- Levine, M. (1990). Sheltering U.S. history for limited English proficient students. Social Studies Review, 30(1), 27-39.
- Meskill, C. (1990). Where in the world of English is Carmen Sandiego? Simulation and Gaming, 21(4), 457-460.
- Montague, M. (1995). The process oriented approach to teaching writing to second language learners. New York State Association for Bilingual Education Journal, 10, 13-24.
- Moya, S. & O'Malley, J. (1994). A portfolio assessment model for ESL. The Journal of Educational Issues of Language Minority Students, 13, 13-36.
- National Geographic Society. (1986). Jerusalem: Within These Walls [videotape]. Stamford, CT: Vestron.
- Northcutt, L. & Watson, D. (1986). Sheltered English Teaching Handbook. San Marcos, CA: AM Graphics.
- Payne, W. & Wilson, C. (1992). Peace in the Middle East [Computer Software]. Moreno Valley, CA.
- Peha, J. (1997). Debates via computer networks: Improving writing and bridging classrooms. Technological Horizons in Education, 24(9), 65-68.
- Peyton, J. (1993). Dialogue Journals: Interactive Writing to Develop Language and Literacy. (ERIC Document reproduction Service No. ED 354 789)
- Rieber, L. (1994). Computers, Graphics, and Learning. Madison, WI: Brown & Benchmark.
- Richard-Amato, P. (1996). Making It Happen: Interaction in the Second Language Classroom. White Plains, New York: Longman.
- Roberts, C. (1994). Transferring literacy skills from 11 to 12: From theory to practice. The Journal of Educational Issues of Language Minority Students, 13, 209-221.
- Rogers, J. (1990). Into, through and beyond...A history class. History and Social Science Teacher, 25(2), 82-87.
- Romo, H. & Falbo, T. (1996). Latino High School Graduation: Defying the Odds. Austin, TX: University of Texas Press.
- Sanchez, F. (1989) What is Sheltered Instruction? Hayward, CA: Alameda County Office of Education.

- Taylor, M. (1990). Simulations and adventure games in CALL. Simulation and Gaming, 21(4), 461-465.
- Turner, S. & Land, M. (1994) HyperCard: A tool for Learning. Belmont, CA: Wadsworth.
- Vasquez, J. (1989). Building instructional strategies from student traits. The Journal of the National Association for Bilingual Education, 13(2), 145-159.
- Versluis, E., Saunders, D. & Crookall, D. (1989). Computerized simulation as mediator of language. In Crookall, D. & Summers, D.(Eds.), Communication and Simulation: From Two Fields to One Theme.(pp.82-90). Philadelphia: Multilingual Matters.
- Vygotsky, L. (1978). Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.
- Willis, J., Stephens, E. & Matthew, K. (1996). Technology, Reading and Language Arts. Boston: Allyn & Bacon.
- Wilson, C. (1996). Who is Right? Israel or the PLO? [Computer Software]. Moreno Valley, CA.